# **REPORT**

# Source Area 11 2020 Groundwater Report

Southeast Rockford Groundwater Contamination Superfund Site Rockford, Illinois

Illinois Environmental Protection Agency

June 2022 Revision 1



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## Section 1

### Introduction

CDM Smith Inc. (CDM Smith) prepared this report for the Illinois Environmental Protection Agency (Illinois EPA) to document groundwater quality for Source Area 11 (Area 11) of the Southeast Rockford Groundwater Contamination (SERGC) Superfund site (Illinois ID No. 2010300074, CERCLIS ID No. ILD981000417). The SERGC site is in Rockford, Winnebago County, Illinois, as shown in **Figure 1.** The work being performed by CDM Smith under contract to Illinois EPA is part of Operable Unit (OU) 3, which is state lead, federally funded through cooperative agreements.

Groundwater monitoring at Area 11 is being conducted as a long-term remedial action (LTRA) for the leachate component of the overall remedy, where "leachate" is defined in the OU3 ROD as shallow, contaminated groundwater within the boundary of the source area. The other component of the Area 11 remedy is the soil component, which is on a separate track currently in the pre-design phase. The leachate and soil components are inherently related and previously advanced together on the same track but were separated for the most part in 2014 when LTRA started for the leachate component. Additional information regarding the soil and leachate components is included in **Section 1.1**.

The first two quarterly rounds of groundwater monitoring in 2020 were conducted in accordance with the Quality Assurance Project Plan (QAPP) Addendum and Sampling and Analysis Plan (SAP) for Area 11 Long-Term Remedial Action Monitoring (CDM Smith 2014). The QAPP and SAP were updated per letters from CDM Smith to the U.S. Environmental Protection Agency (U.S. EPA) (CDM Smith 2019). The third and fourth quarterly sampling rounds in 2020 were conducted in accordance with the Final QAPP and SAP for Source Area 11 Long-Term Remedial Action Groundwater Monitoring (CDM Smith 2020).

The report focuses on the methods and procedures used during the 2020 quarterly monitoring events, presents the data for the groundwater elevation measurements and quarterly analytical results, summarizes information from monitoring events conducted from 2011 to 2020, and concludes with an assessment of whether contaminant concentrations are on track to meet RGs.

# 1.1 Area 11 Background Information

Area 11 is located on the northeast corner of Harrison Avenue and Eleventh Street in Rockford, Illinois. Area 11 is one of four known and identified source areas that are part of the SERGC site (**Figure 1**). Area 11 was identified as one of the SERGC source areas during the OU2 RI as documented in the OU2 Record of Decision (ROD) (U.S. EPA 1995).

Area 11 is situated in a mixed light industrial, commercial, and residential area. Area 11 itself currently consists of greenspace and light industrial property. **Figure 2** depicts the outline of Area 11 as it was defined in the OU2 RI report (CDM Smith 1995).



The northern third of Area 11 includes a portion of an Auto Zone parking lot and vacant land consisting of an unused parking lot and greenspace that was formerly occupied by a tire shop which was demolished around 2017. The middle third of Area 11 is occupied by Accurate Metals – Illinois (AMI), a specialty metal fabricating operation. The AMI building was formerly occupied by Rohr Manufacturing and prior to that, Rockwell Graphics Systems.

The southern third of Area 11 is greenspace except for the southeast corner which is an entrance drive to the AMI facility. The 75,000-square foot greenspace is currently owned by the City of Rockford, but was formerly Rockford Varnish, Villa Di Roma restaurant (the building was formerly part of Rockford Varnish), H&H Wood Products and Pallets, Rockford Coatings, and adjacent parking areas. Following the City's purchase of the property in 2014, all asphalt and above ground structures (and some shallow subsurface structures), were removed prior to the Harrison Avenue reconstruction that started in 2016. Some concrete foundation walls in the vicinity of the former buildings and ASTs are known to remain, and it is generally believed that most other subsurface structures remain. After completion of the Harrison Ave. construction in 2018, the entire AOI was covered with topsoil and seeded, and a handful of saplings were planted.

On **Figure 2**, the greenspace is identified as an Area of Interest (AOI) because previous Area 11 investigations (CDM Smith 2009; 2013) indicate it is within this specific portion of Area 11 where all or most waste was deposited, and continuing sources of contamination may still exist.

Potential contaminant sources include eight former aboveground storage tanks (AST) and ancillary systems (i.e., piping) that were located east of the former Rockford Varnish facility. **Figure 1** in **Appendix A** shows the approximate locations of the former ASTs and buildings with superimposed locations of the existing onsite monitoring wells. The ASTs were removed sometime between July 2003 and April 2005 based on Google Earth Pro historical imagery. The specific chemicals that were stored in individual tanks is not known. The OU3 RI report mentions other potential sources including a "bunker" used by Rockford Varnish that seeped a tar-like substance and a dumpster used by Rockwell Graphics that leaked cutting oils.

The geologic stratigraphy at Area 11 is fine- to medium-grained sand down to about 30 feet below ground surface (bgs), followed by medium- to coarse-grained sand with gravel down to about 75 feet bgs. Below this is a silt and clay layer believed to be around 10 to 15 feet thick, based on the presences of what appears to be the same unit observed in MW114B at a similar elevation (656 feet above mean sea level [msl]), located 0.25 mile south of Area 11; however, the silt and clay unit is not present down to 640 feet msl in MW126B, located 0.4 mile west-southwest of Area 11. The depth to groundwater is approximately 30 feet bgs and varies seasonally. A geologic cross section is provided with the site conceptual site model (CSM) included in **Appendix A**.

Groundwater in the unconsolidated material at Area 11 enters the eastern edge of the site flowing in a northwesterly direction before eventually turning west, and then west-southwest as it exits the site's western boundary. Further downgradient, groundwater flow is directly to the southwest and the Rock River. This gradual shift in groundwater flow from the northwest to the southwest in the vicinity of Area 11 is responsible for the "banana" shape of the historic groundwater contaminant plume. This plume was documented by CDM Smith during the



remedial investigation phases and is critical to understanding contaminant migration patterns in groundwater at Area 11.

In accordance with the OU3 Record of Decision (ROD) (U.S. EPA 2002), the Area 11 remedy selected for contaminated soil is soil vapor extraction (SVE) and the remedy for "leachate" (i.e., shallow, contaminated groundwater within the boundaries of the source area) is no action, with groundwater monitoring and institutional controls. The ROD did not propose a remedial alternative for the treatment of leachate on-site because modeling indicated that groundwater would meet standards by the time it exited the source area. However, the ROD indicates that an air sparging component can be added to the remediation system if an improvement in groundwater quality is not observed.

Contaminants of concern (COC) listed in the ROD include benzene, ethylbenzene, methylene chloride, toluene, trichloroethene, and xylenes. However, based on the magnitude of the remediation goal (RG) exceedances in groundwater samples collected since 2008, ethylbenzene, toluene, and xylenes (ETX) are generally considered to be the primary COCs specifically related to Area 11.

Three rounds of pre-design investigation activities were conducted between 2007 and 2018. The first round was conducted in 2007/2008 (CDM Smith 2009) and the second in 2010/2011 (CDM Smith 2013). One common objective was to identify and characterize the source material locations in the vadose zone (i.e., where waste material was deposited) that are the targets of the SVE soil component remedy. However, the precise locations of the vadose contamination have not been located for various reasons including site access issues, buried debris, and the assumed small footprints (i.e., a couple feet in diameter at the water table) of the source material. Because most of the material released to the environment may have been spilled as chemical product, it is also possible that the spilled product has evaporated or degraded to the point that only trace amounts remain in the vadose zone. The number of individual sources present at Area 11 is not known but it is believed that at least two exist based on groundwater results. The Phase II Pre-Design Technical Memorandum (CDM Smith 2013) contains a comprehensive discussion of the nature and extent of groundwater contamination and the possible source locations at Area 11.

Pre-design objectives that were successfully achieved during the first two pre-design phases included defining the nature and extent of groundwater contamination at and downgradient of Area 11 for the leachate component remedy. As part of the pre-design activities, quarterly groundwater sampling was conducted (with several interruptions from 2011 through 2013), before changing to semiannual sampling in August 2014 for the start of the leachate component LTRA. These events have resulted in the soil component of the selected remedy remaining in the remedial design (RD) phase because the source hasn't been located, while the leachate component has progressed into LTRA.

From 2015 through 2018, semiannual groundwater monitoring under the leachate component LTRA was irregular due to various factors. For example, in 2015, only one round of groundwater sampling was performed due to contract issues and from 2016 to 2018, sampling activities were impacted by the Harrison Avenue construction, allowing only three rounds of groundwater sampling to be completed. Following completion of the Harrison Ave., construction, monitoring



well MW007 was installed on October 29, 2018, and semiannual sampling resumed in November 2018.

The third round of pre-design field activities was conducted for only the soil component in October 2018 (CDM Smith 2018). This phase of work was conducted after the area adjacent to Harrison Avenue had been cleared of buildings, structures, pavement, and road construction debris. The purpose of the activities was to locate and characterize contaminant source material in the Area 11 vadose zone after the removal of obstructions that impacted previous investigations. This phase of work was narrowly focused on areas immediately upgradient of highly contaminated groundwater observed in samples collected from MW004A, and downgradient of suspected point sources of contamination that had become accessible due to the completion of the construction activities. The planned activities included two trenches and one shallow test pit to be excavated followed by direct push soil and groundwater sampling. Details of the activities are documented in the Pre-Design Technical Memorandum (CDM Smith 2018). This third phase of pre-design work was not successful in identifying the location of contaminant source material at Area 11 because of buried obstructions believe to be foundations associated with the previously removed ASTs.

Based on the groundwater data collected from 2017 through 2019, it was determined that while contaminant concentrations had decreased within Area 11 in the areas where barriers to infiltration had been removed, contaminants (primarily ETX) were continuing to migrate offsite at least a short distance at concentrations above the RGs. It was decided that data from two years (2020 and 2021) of quarterly groundwater monitoring under the leachate component LTRA would be used to develop a revised CSM for Area 11 to assist with determining a path forward for the soil component RD. Because this work is separate from the leachate component LTRA, a separate technical memorandum to address the soil component remedy will be prepared later under a cooperative agreement executed for the soil component RD. However, if a soil component cooperative agreement has not been executed, the technical memorandum will be prepared as a separate report regardless.



### Section 2

# Field and Analytical Activities

**Table 1** provides a summary of the groundwater monitoring sampling dates and wells sampled for the 2020 quarterly events. The first quarter was conducted in March, the second quarter in June, the third quarter in September, and the fourth quarter in December.

The current groundwater monitoring network includes 19 monitoring wells, as shown in **Figure 3**. Groundwater samples are collected from 9 monitoring wells during groundwater sampling events with the remaining 10 used only for water level measurements to provide better definition of groundwater flow at and around Area 11. The 10 water level only monitoring wells are not sampled for chemical analysis because they are located cross gradient to Area 11 and are not impacted by Area 11.

Sample collection from monitoring well MW130A, which is located downgradient of Area 4 and upgradient of Area 11, was added to the monitoring network starting in September 2020 to provide additional background data. MW130A was previously sampled from November 2009 to May 2018 as part of the Area 4 RA groundwater monitoring network. In May 2018, U.S. EPA and Illinois EPA determined that the RA was complete, and EPA deleted Area 4 from SERGC on September 30, 2020 (Federal Register 2020).

Water level only monitoring wells MW37 and MW38 were added to the water level only network starting in June 2020, followed by MW32, MW22A, MW125, and MW126A starting in September 2020. **Table 2** provides monitoring well construction details.

### 2.1 Groundwater Elevations

Depth to groundwater measurements were collected manually at each well prior to purging and sample collection, except for the September 2020 event, where applicable. Prior to the September 2020 event, three water level only monitoring wells were inaccessible and this round of water measurements was subsequently collected in October 2020. In addition, water levels for the December 2020 were collected on the last day of November.

An electronic water level indicator was used and decontaminated before and after each use. Potentiometric surface maps were prepared from the groundwater elevation data collected during the quarterly water level events in 2020, using data from the 18 monitoring wells screened in the upper portion of the unconsolidated materials (**Figures 4 and 5**). With the larger set of monitoring points during October and November, these events present a more accurate picture of groundwater flow patterns. The groundwater elevation data used to compile these maps is provided in **Table 3**.



### 2.2 Sampling Methods

The Area 11 monitoring wells were each purged using a submersible pump and pump controller capable of operating at low-flow rates. All wells were purged and sampled in general accordance with the applicable SAP.

For all wells sampled, field measurements of pH, temperature, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential were monitored with a flow-through multiparameter probe to identify the point stabilization was observed during purging. Parameter readings were recorded at 5-minute intervals and purging continued until the field parameters were observed to be within stable range for three consecutive readings. The stabilization requirements are provided as follows:

- pH: ±0.25 standard units
- Dissolved oxygen: ±10 percent
- Specific conductance: ±50 microsiemens per centimeter (μS/cm)
- Turbidity: less than 5 nephelometric turbidity units (NTU) or ±10 percent
- Temperature: ±0.5 C°
- Oxidation-reduction potential: ±10 millivolts (mV)

Final readings taken prior to sampling are provided in **Table 4**, and original data sheets listing all readings recorded during purging are provided in **Appendix B**.

Quality control samples specified in the applicable QAPP for each of the groundwater sampling events included one field duplicate per 10 (or fewer) investigative samples, one field blank per 10 (or fewer) investigative samples collected using non-dedicated equipment, one trip blank for each cooler shipped containing aqueous samples for VOC analysis and 1,4-dioxane analysis by Region 5 Analytical Service Branch (ASB) laboratory, and one matrix spike/matrix spike duplicate (MS/MSD) per 20 (or fewer) samples.

The field duplicate frequency was met for all parameter groups for all four quarterly events. The field blank collection frequency was met for 1,4-dioxane and VOCs for all four quarterly events, however field blank collection frequency was not met for the attenuation parameters (sulfate, nitrate, alkalinity, and methane) for the first two quarterly events. Even though the frequency criteria were not met for attenuation parameters, data quality objectives are not compromised as these analytes are not constituents of concern and the field blanks that were collected during the first two quarters did not have unusual detections of these analytes. A trip blank was sent with each cooler containing samples for VOC or 1,4-dioxane analysis (when analyzed by ASB as a VOC). Issues related to data quality are discussed in Section 2.4 and in the individual validation reports in **Appendix C**.

Field instruments were calibrated daily to the appropriate standards, in accordance with the SAP. The field samples collected for dissolved ferrous iron were run through a 0.45-micron inline filter attached to the sample tubing and analyzed in the field with a field test kit. New or dedicated



sample tubing was used for each discrete sampling location. The groundwater samples selected for laboratory analysis were collected directly from the pump discharge tubing into prepreserved sample containers. The sample containers were provided by a commercial sample container vendor.

### 2.3 Analytical Methods and Laboratories

Groundwater samples for 2020 were analyzed for Target Compound List (TCL) VOCs by U.S. EPA Contract Laboratory Program (CLP) laboratories under Statement of Work (SOW) SOM02.4 or VOCs by Region 5 ASB laboratory using Standard Operating Procedure (SOP) MS023. Analysis of 1,4-dioxane was performed by the ASB laboratory in accordance with ASB SOP MS035 for low-level 1,4-dioxane, or by CLP under SOW SOM02.4 and MA: 3054.0 – 1,4-Dioxane Analysis with Lower [contract required quantitation limit] CRQL. See the end of this section for additional discussion regarding the analysis of 1,4-dioxane.

The U.S. EPA CLP used Chemtech Consulting Group and Pace Analytical Services laboratories for organic sample analyses. Tech Law Inc. (Tech Law) Environmental Services Assistance Team (ESAT), provided services to Region 5 ASB and STAT Analysis Corporation (STAT), Chicago, Illinois and Eurofins TestAmerica, Savannah, Georgia provided anions, alkalinity, and methane analyses. Field analysis of dissolved ferrous iron was performed in accordance with HACH Method 8146.

Analysis of 1,4-dioxane as a stand-alone semi-volatile organic compound (SVOC) was added to the Area 11 parameter list at the request of U.S. EPA starting with the November 2019 sampling event. Prior to 2012, 1,4-dioxane was part of the CLP VOC target compound list (TCL), but the analysis was problematic and resulted in frequent data rejection due to matrix interference. The analysis of 1,4-dioxane was subsequently placed on the CLP SVOC TCL and no longer analyzed, until requested by U.S. EPA, because SVOCs are not Area 11 COCs. The U.S. EPA Region 5 CLP representative should be contacted for additional information regarding the historical analysis of 1,4-dioxane through CLP.

### 2.4 Data Evaluation and Usability

A data evaluation/validation review was conducted on the analytical data for the four 2020 quarterly groundwater monitoring events. Quality assurance objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The PARCCS parameters characterize the quality of the data and are called data quality indicators (DQI). The DQIs provide a mechanism for ongoing quality control (QC) and evaluating and measuring data quality throughout the project. The measurement performance criteria are outlined in the 2014 QAPP/SAP Addendum (CDM Smith 2014), modified per letters from CDM Smith to U.S. EPA (CDM Smith 2019), and the August 2020 QAPP/SAP update (CDM Smith 2020).

Reviewing the collected data is necessary to determine if data measurement objectives established in the QAPP were met. In general, the following data measurement objectives were considered:



- Achievement of analytical method and reporting limit requirements
- Adherence to and achievement of appropriate laboratory analytical land field QC requirements
- Achievement of required measurement performance criteria for DQIs (the PARCCS parameters)
- Adherence to sampling and sample handling procedures
- Adherence to the sampling design and deviations documented on field change notifications, if required

Data verification, data validation, and data assessment were used to verify adherence to the QAPP procedures and requirements and achievement of the measurement performance criteria of the PARCCS parameters. These assessments were used to reconcile the planned objectives detailed in the QAPPs against the investigation results. The outputs serve to verify that the collected data are of sufficient quality to support their intended use.

There were 25 sample delivery groups from the CLP laboratories, Tech Law, STAT and Eurofins. Validation was performed following the Stage 2B validation requirements, EPA's current National Functional Guidelines, current CLP SOWs, and the Region 5 Organic CLP validation SOP 83074-8-33-601-SO-1143.R1. In accordance with the QAPPs, the Tech Law, STAT and Eurofins data were validated by CDM Smith at a Stage 2B Validation/Verification level. The CLP data was validated by the U.S. EPA Region 5 ESAT contractor. CDM Smith reviewed the CLP validation reports and verified the sample results and qualifiers.

The detailed data evaluation/validation discussion is provided as a preface to the laboratory data reports in **Appendix C**. Some analytes were qualified as estimated (J), estimated biased high (J+) or biased low (J-) and/or non-detect (U) or estimated non-detect (UJ), based on validation criteria. Specific details on qualifications are provided in the individual data validation reports in **Appendix C**.

All field duplicate relative percent difference (RPD) results were within appropriate criteria except for field duplicate pair A11-MW007-201201/A11-MW007-201201-D. Sample results for isopropylbenzene, n-propylbenzene, sec-butylbenzene, 1,3,5-trimethylbenzene, benzene, naphthalene, and n-butylbenzene were qualified as estimated (J/UJ) based on RPD criteria or absolute difference criteria. For this field duplicate pair, the RPD criteria was met for the anions, alkalinity, and methane results.

A review was conducted on the VOC analyses as the sample concentrations vary enough to be suspect based on past sampling results. The COCs were evaluated for possible sample label issues and a comparison was done between samples that were collected on the same day. The COCs indicated no mislabeled samples and the sample comparison showed no other sample that had similar results comparable to A11-MW007-201201or A11-MW007-201201-D. A review of the raw laboratory data and chromatograms showed no obvious system errors. The VOC sample results that did not meet RPD criteria are estimated following data validation guidance and there is the potential a sample mix up may have occurred in the field or laboratory despite no



indication that a mix up occurred. The results should be used with caution and future sampling events at these locations will be conducted to evaluate the variable sample results.

In summary, all the validated and reviewed data are suitable for their intended use for site characterization. No data were rejected for the 2020 sampling events. Sample results that were qualified as estimated are usable for project decisions. Results that have been rejected from previous sampling years are not usable for project decisions. The laboratory and validation qualifiers are provided in the data tables referenced in **Section 3**.



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### Section 3

# Results

This section presents the results of the four quarterly groundwater sampling events in 2020. The Area 11 monitoring wells include two wells upgradient of the Area 11 AOI (MW001 and MW130A), four wells within the Area 11 AOI (MW002, MW003, MW004A, and MW004B) and three wells downgradient of the Area 11 AOI (MW005, MW006, and MW007). Upgradient well MW130A was added to the well network for the September and December sampling events.

Monitoring wells MW004A and MW004B are adjacent with MW004A screened in the shallow portion of the aquifer just below the water in a zone of significant contamination and MW004B is screened 45 feet lower, on top of a silt and clay layer to monitor the vertical extent of the groundwater contamination within the source area. Specific screened intervals and additional well information is provided in **Table 2** and a cross section is provided in **Appendix A**.

### 3.1 Hydraulic Results

Groundwater elevation measurements were collected prior to the start of each quarterly sampling event and in October 2020 as discussed in **Section 2.1**. The dates of data collection and the water elevations measured for the 2020 groundwater monitoring events are presented in **Table 3**.

Potentiometric surface maps were prepared using kriging, with default settings in Surfer®. The maps are presented for the third and fourth quarter events are shown as **Figures 4 and 5**. These events were selected because the greater number of water level data points present a more complete picture of groundwater flow patterns. Groundwater in the unconsolidated material enters the eastern edge of Area 11, flowing in a northwesterly direction before turning west-southwest as it exits Area 11 along the western boundary. Due to this gradual shift in groundwater flow direction, two gradients that run parallel to groundwater flow are estimated for Area 11. From the eastern boundary to the shift in direction near Harrison Avenue, groundwater gradients are estimated using elevation data from MW32 (as the upgradient location), and MW004A (as the downgradient location). After the flow direction shifts, the gradients are estimated using elevation data from MW0007 (as the upgradient location), and MW126A (as the downgradient location).

Third quarter groundwater elevations were measured on October 15, 2020. The groundwater flow direction was predominantly to the west, as shown in **Figure 4**, with the bend in flow direction occurring near Harrison Avenue. This quarterly event includes water level measurements from 19 monitoring wells, and the gradient from MW32 to MW004A was approximately 0.003971 feet/feet. The gradient from MW007 to MW126A was approximately 0.001411 feet/feet.

The fourth quarter groundwater elevations were measured on November 30, 2020. The groundwater flow direction was measured predominantly to the west, as shown in **Figure 5**, with the bend in flow direction occurring near Harrison Avenue. This quarterly event includes water



level measurements from 19 monitoring wells. The groundwater gradient from MW32 to MW004A was approximately 0.003911 feet/feet and the gradient from MW007 to MW126A was approximately 0.001360 feet/feet.

### 3.2 Laboratory Analytical Results for VOCs

Analytical results for the groundwater samples are compared to RGs established for Area 11 COCs in the OU3 ROD (U.S. EPA 2002) and to the Illinois groundwater quality standards for Class I groundwater in 35 IAC 620.410. Finally, results for compounds for which an applicable or relevant and appropriate enforceable standard does not exist are compared to screening criteria from "Tiered Approach to Corrective Action Objectives [TACO], Table E: Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route" in 35 IAC 742, **Appendix B**.

Within the text, results are reported as being detected at a concentration that is "x" times the RG to facilitate exceedance comparisons between compounds that have different RGs. Although this method is generally useful for evaluating the relative concern posed by different exceedances, the Maximum Contaminant Levels (MCL) and Illinois Class I standards upon which the RGs are based are not always derived solely from risk-based thresholds and may also account for aesthetics or technical and financial barriers associated with public health protection.

**Table 5** summarizes all VOCs detected during the 2020 quarterly groundwater monitoring events. **Table 6** summarizes, by individual monitoring well, the VOCs that have been detected in at least one sample collected from that monitoring well. In both tables, detected compounds are shown in bold type and compounds exceeding their RG are shaded. For sample locations from which a parent and duplicate sample were collected, if at least one of the two sample results exceeds an RG for a parameter, the location is described as exceeding RGs in the results discussion. **Figure 6** through **Figure 9** present analytical results by quarterly event for VOCs with an RG that were detected for each well location. Complete analytical results and data validation reports are provided in **Appendix C**.

The groundwater monitoring investigative samples and associated QC samples were analyzed and the data validated as described in **Sections 2.3** and **2.4**. Due to the differences in analytical methods for VOCs used by the different laboratories (CLP and ASB), the VOC parameter lists analyzed by each laboratory are slightly different. In **Tables 5 and 6**, any parameters not analyzed for a particular sampling event because of laboratory assignment are designated with "NA" for not analyzed. In addition, MW130A was added to the monitoring well network in August 2020; therefore, analytical results for only September and December 2020 are provided.

A recurring issue is that high concentrations of ETX compounds in samples collected from highly contaminated wells routinely require dilution prior to analysis. This results in elevated reporting limits (RL) for all other compounds that may exceed the other compound's respective RG in the same sample. For the 2020 sampling year, this occurs in the analytical results for the March, September, and December sampling events and to the greatest extent in samples collected from MW002 and MW004A, the two most contaminated Area 11 wells. Because of this "masking" effect, it is not possible to conclusively determine if other compounds are present above their RGs in the samples.



Based on discussions with staff from the U.S. EPA Region 5 Laboratory Services & Applied Sciences Division, this analytical issue is not easily resolved. The elevated RLs are caused by the high dilution factors needed to provide accurate results for the compounds with the highest concentrations. Analyzing undiluted, high concentration samples will overload the analytical instruments leading to qualified results from matrix interference and extensive down-time to clean the instrument. To prevent these costly and time-consuming issues, prior to analysis the laboratory typically screens samples for high concentration samples that will require dilution for accurate analysis.

However, the analytical results for the June 2020 event do not have elevated RLs resulting from dilution. (The reason that the samples for this one sampling event were not diluted is not known.) This one round of undiluted samples is not representative of all four 2020 sampling events, but it does give some indication of contaminant concentrations for the other compounds that are undetected at RLs greater than the RG in the other 2020 sampling events.

# 3.2.1 First Quarter (March 2020) Volatile Organic Compounds Exceeding Remediation Goals

During the March 2020 groundwater sampling event, eight Area 11 wells were sampled (**Table 5** and **Figure 6**). Five wells had detections of contaminants above the respective RG with several contaminants present at orders of magnitude times the RG:

- MW002 ethylbenzene (10 times the RG), toluene (79 times the RG) and xylenes (2.5 times the RG)
- MW003 ethylbenzene (2 times the RG), xylenes (1.3 times the RG) and 1,4-dioxane (1.1 times the RG)
- MW004A toluene (45 times the RG)
- MW004B 1,4-dioxane (1.3 times the RG)
- MW007 ethylbenzene (1.3 times the RG)

MW002 had the most compounds exceeding RGs at Area 11 and at the highest concentrations.

# 3.2.2 Second Quarter (June 2020) Volatile Organic Compounds Exceeding Remediation Goals

Eight Area 11 monitoring wells were sampled during the June 2020 sampling event (**Table 5** and **Figure 7**). Seven wells had detections of contaminants above the respective RG with several contaminants present at orders of magnitude times the RG. Analytical results for the June 2020 sampling event did not have nondetects at RLs greater than RG as in other sampling events. This results in the detection of vinyl chloride and tetrachloroethene at concentrations just above their respective RGs.

- MW001 1,4-dioxane (2 times the RG)
- MW002 ethylbenzene (9 times the RG), toluene (68 times the RG), xylenes (2.5 times the RG) and vinyl chloride (2 times the RG)



- MW003 1,4-dioxane (1.2 times the RG)
- MW004A toluene (52 times the RG) and tetrachloroethene (PCE) (1.1 times the RG)
- MW004B 1,4-dioxane (1.5 times the RG)
- MW005 bromodichloromethane (2 times the TACO criteria) and 1,4-dioxane (1.1 times the RG)
- MW007 ethylbenzene (1.2 times the RG)

MW002 continues to have the most compounds exceeding RGs and at the highest concentrations.

# 3.2.3 Third Quarter (September 2020) Volatile Organic Compounds Exceeding Remediation Goals

For the third quarter monitoring event, nine wells were sampled because MW130A was added to the monitoring well network in August 2020 (**Table 5** and **Figure 8**). Six wells had detections of contaminants above the respective RG with several contaminants present at orders of magnitude times the RG:

- MW002 ethylbenzene (12 times the RG), toluene (39 times the RG) and xylenes (33 times the RG)
- MW004A toluene (43 times the RG)
- MW004B 1,4-dioxane (1.02 times the RG)
- MW005 1,4-dioxane (1.1 times the RG)
- MW006 1,4-dioxane (1.1 times the RG)
- MW007 ethylbenzene (3.5 times the RG)

MW002 continues to have the most compounds exceeding RGs at Area 11; however, the greatest RG exceedance was toluene in MW004A.

# 3.2.4 Fourth Quarter (December 2020) Volatile Organic Compounds Exceeding Remediation Goals

All nine Area 11 monitoring wells were sampled during the December 2020 quarterly sampling event (**Table 5** and **Figure 9**). Three wells had detections of contaminants above the respective RG with several contaminants present at orders of magnitude times the RG:

- MW002 ethylbenzene (15 times the RG), toluene (33 times the RG) and xylenes (3.8 times the RG)
- MW004A toluene (34 times the RG)
- MW007 ethylbenzene (5 times the RG) and benzene (8 times the RG in field duplicate)



MW002 continued to have the most compounds exceeding RGs at Area 11; however, the greatest RG exceedance was toluene in MW004A, but by only a slight margin over toluene in MW002.

### 3.2.5 Comprehensive Compounds Exceeding Remediation Goals

This section will summarize long-term trends in contaminant concentrations in samples collected from the Area 11 monitoring well network since routine sampling began in April 2011, despite various interruptions described in **Section 1.1**. The results are included in **Table 6**. Scatter plots with trendlines for compounds detected in wells at concentrations that routinely exceed RGs are included in **Figures 10 through 12**. Because reliable analysis of 1,4-dioxane has occurred only since November 2019, long-term trends are not available and discussion of 1,4-dioxane may be minimal.

An additional background well, MW130A, was added to the Area 11 monitoring well network starting with the September 2020 sampling event. This well is located downgradient of Area 4 (it was previously part of the Area 4 RA monitoring well network) and upgradient of Area 11. See **Figure 1** for the location of Area 4 relative to Area 11. The compounds detected during the September and December sampling rounds were 1,1,1-trichloroethane (TCA), 1,1-dichoroethene (DCE) and 1,4-dioxane at low single-digit concentrations near the RLs, and well below the RGs.

As part of Area 4 sampling, the highest concentration of TCA detected in MW130A was 630 micrograms per liter ( $\mu$ g/L) in samples collected both in November 2010 and January 2011, and the highest DCE concentration was 18  $\mu$ g/L in the sample collected in November 2010. After these maximum concentrations were recorded, the concentrations of both compounds decreased rapidly following implementation of the Area 4 leachate control remedy that started operation in December 2009. Concentrations of both compounds fell below their respective RGs starting with samples collected in July 2011 and remained below their respective RGs until Area 4 groundwater monitoring ceased in November 2017. The last sample collected from MW130A as part of the Area 4 RA in November 2017 contained TCA at a concentration of 11  $\mu$ g/L and DCE at a concentration of 3.3  $\mu$ g/L, both of which are similar to the concentrations detected during 2020.

Monitoring well MW001 is also considered an upgradient, background well for Area 11. Samples collected from this well during five events from 2011 to 2012 contained TCA, DCE, and trichloroethene (TCE) at concentrations just above their respective RGs. Starting in December 2012, concentrations of these compounds steadily decreased to low double- and single-digit levels that have remained consistently below RGs. It is assumed that the decrease in concentrations of chlorinated VOCs is attributable to the Area 4 hydraulic containment leachate component remedy that operated from December 2009 to October 2018. See **Figure 1** for the location of Area 4 relative to Area 11. The ETX compounds have been detected sporadically since 2011. When detected, the ETX results have been estimated below the RL. Of the five 1,4-dioxane results since November 2019, two have been almost twice the RG, two have been just below the RG, and one was nondetect. As seen in Table 6, the high and low concentrations are interspersed and although no statistical trend analysis was performed, no obvious trend is readily apparent.

Continuing in a generally hydrogeologic downgradient order, the well locations with the highest concentrations of contaminants and greatest RG exceedances are MW004A and MW002. The greatest exceedance and highest concentration of any VOC detected in groundwater at Area 11



was toluene at 520 times the RG (520,000  $\mu$ g/L) in groundwater screening sample A11-GW-5, collected on January 15, 2008, from 38 to 42 feet bgs at a location several feet from MW004A (screened interval of 30 to 40 feet bgs) during the first round of predesign field activities (CDM Smith 2009). Reference values for the solubility limit of toluene vary and the solubility limit itself varies with temperature, but in general 520,000  $\mu$ g/L is at or very close to the solubility limit of toluene. Since 2011, the highest concentrations of toluene were 230 times the RG in MW004A (in June 2013) and 220 times the RG in MW002 (in March 2017).

Toluene concentrations in samples collected from MW004A through 2020 have decreased from a maximum of 230 times the RG (230,000  $\mu$ g/L) in June 2013, to 34 times the RG (34,200  $\mu$ g/L) in December 2020 (see **Figure 10**). The greatest decrease in concentration in MW004A was between samples collected in April 2016 and March 2017 when toluene concentrations dropped by almost half from 150 times the RG (150,000  $\mu$ g/L) in April 2016, to 79 times the RG (79,000  $\mu$ g/L) in March 2017. Since 2017, toluene concentrations have fluctuated, but have generally continued to decrease.

Ethylbenzene and xylenes concentrations in samples collected from MW004A have continued to decrease from their initial, higher levels in 2011 and 2012. The xylenes concentrations in samples collected from MW004A have been below the RG of 10,000  $\mu$ g/L since 2012, and the ethylbenzene concentrations have been below the RG of 700  $\mu$ g/L since 2013.

Since 2011, the only chlorinated VOCs in samples collected from MW004A at concentrations above an RG are TCE and PCE, which both have an RG of 5  $\mu$ g/L, and DCE, which has an RG of 7. The highest concentration and greatest RG exceedance of the three compounds was DCE at a concentration of 1,100J in April 2013. As previously discussed, elevated RLs in most of the samples collected from MW004A prevent a conclusive determination of the presence or absence of many VOCs in samples; however, samples collected in June 2013, April 2016, and June 2020 do not have elevated RLs. In the sample collected in June 2013 all three compounds exceeded their respective RGs ranging from TCE at 1.2 times its RG to PCE at 7.4 times its RG, in June 2016 the only RG exceedances were PCE (3.6 times the RG) and TCE (1.8 times the RG), (DCE was not detected at 5U  $\mu$ g/L), and in June 2020 only PCE exceeded its RG (1.3 times the RG). Other chlorinated VOCs were detected, but the concentrations of a chlorinated VOCs in the June 2020 were similar to concentrations in samples collected from background well MW001. Finally, 1,4-dioxane was not detected above its RG in any of the 2019 or 2020 sampling events when analyzed and at concentrations below background well MW001 in four of five samples.

Toluene concentrations in samples collected from MW002 through 2020 have decreased from a maximum of 220 times the RG (220,000  $\mu$ g/L) in December 2012 and March 2017, to 22.5 times the RG (22,500  $\mu$ g/L) in November 2019 (see **Figure 11**). The greatest decrease of toluene concentrations was between May and November 2019 when toluene concentrations decreased by almost four times from 88 times the RG (88,000  $\mu$ g/L) in May 2019, down to 22.5 the RG (22,500  $\mu$ g/L) in November 2019. However, the toluene concentration rebounded back to 78.6 times the RG (78,600  $\mu$ g/L) the following sampling event in March 2020. For the remaining 2020 sampling events, the toluene concentration decreased down to 33.2 times the RG (33,200  $\mu$ g/L) in December 2020.



Concentrations of ethylbenzene and xylenes in MW002 remained at levels over their RGs since 2012, showing decreasing concentrations through 2019 (see **Figure 11**). Beginning in 2020, the concentrations of both compounds have gradually increased to levels two to three time the previous highest levels. In addition, benzene was detected once in a sample collected from MW002 in June 2013, at a concentration just over its RG of 5  $\mu$ g/L. Vinyl chloride was detected in June 2020 at a concentration of 4.4  $\mu$ g/L, which is two times the RG of 2.0  $\mu$ g/L. The compound 1,4-dioxane was not detected above the RG of 7.7  $\mu$ g/L when analyzed in any of the 2019 or 2020 sampling events.

Samples collected from MW004B are similar to those collected from background wells MW001 and MW130A, with low double- and single-digit detections of several chlorinated compounds and sporadic, low-level detections of ETX compounds. The steady decrease in TCA concentrations since 2011 is at least partially attributable to the Area 4 leachate component remedy. The compound 1,4-dioxane was detected above the RG in four of the five sampling events where analyzed. The average of the 1,4-dioxane detections for the five sampling events is approximately  $10~\mu g/L$ , which is above the RG of 7.7  $\mu g/L$ .

MW003, located about 85 feet south of MW002 as shown in **Figure 2**, has not shown significant ETX contamination since September 2012, however, the May 2019 and March 2020 sampling events showed a spike in total xylene concentration slightly over the RG. Additionally, in March 2020, the ethylbenzene concentration increased from below the RG to twice the RG (1,500  $\mu$ g/L). Ethylbenzene concentrations in this well have been well below the RG of 700  $\mu$ g/L since 2012 except for one RG exceedance (730  $\mu$ g/L) in 2014. The average of the 1,4-dioxane detections for the five sampling events is approximately 8  $\mu$ g/L, which is slightly above the RG of 7.7  $\mu$ g/L.

MW007 is located about 113 feet directly west and downgradient of MW002, as shown in **Figure** 3. To date, eight rounds of samples have been collected from this well with ethylbenzene above its RG for all sample events (see **Figure 12**). Ethylbenzene concentrations have fluctuated ranging from 9.5 times the RG (6,700  $\mu$ g/L) in November 2018, down to two times the RG (1,420  $\mu$ g/L) a year later in November 2019 and increasing in 2020 to five times the RG (3,660 μg/L). Xylenes were detected above the RG for the first event and declined to levels approximately half the concentration of the RG during both 2019 sampling events. In 2020, xylenes increased and were detected at approximately two times the 2019 levels, but still below the RG. Toluene was detected below the RG in November 2018, but not detected in 2019 or 2020, despite being a relatively short distance downgradient from MW002 with its high concentrations of toluene. Benzene was reported at eight time the RG in the field duplicate (44.3 µg/L) and was non-detect in the parent sample in December 2020. The results are considered estimated because the overall agreement between sample and field duplicate was poor. The data from 2018 and 2019 indicate that sample dilutions may have resulted in the masking of benzene detections in these earlier sampling events. The compound 1,4-dioxane was not detected above the RG when analyzed in any of the 2019 or 2020 sampling events.

Monitoring wells MW005 and MW006 are located downgradient of Area 11. Samples collected from these wells have contained a combination of site-wide chlorinated compounds, and ETX compounds at low double- and single-digit concentrations. The only compounds detected above RGs in either well are 1,4-dioxane, bromodichloromethane and benzene. (The comparison



criterion for bromodichloromethane is from TACO and is not considered an RG.) Bromodichloromethane has been detected above the RG several times in both wells. Bromodichloromethane is a trihalomethane, generally referred to as a disinfection by-product resulting from chlorine treatment of drinking water that has been routinely detected above its RG in the Area 4 background monitoring well. Its detection is not considered to be attributable to either source area. Benzene has been detected once in samples collected from MW005, and several times in MW006, including once at a concentration above its RG of 5  $\mu$ g/L in May 2019. Benzene is not known to be related to Area 11, but the possibility still exists that it is related. The average of the 1,4-dioxane detections for the five sampling events for MW0005 is 6.8  $\mu$ g/L and 4.5  $\mu$ g/L for MW0006, both below the RG of 7.7  $\mu$ g/L.



## Section 4

### **Conclusions**

Groundwater samples collected from monitoring wells MW002 and MW004 demonstrate that these two wells are screened in the most contaminated groundwater at Area 11, with MW002 being the more contaminated of the two based on it containing higher concentrations of more VOCs. Although toluene concentrations in both wells have decreased by almost an order of magnitude since 2011, toluene concentrations in both wells remain well above the RG, and ethylbenzene and xylenes concentrations have increased in samples collected from MW002. Further, samples collected from MW007 have contained ethylbenzene at concentrations that exceed its RG since it was installed in 2018. Although the concentrations of ethylbenzene had been steadily decreasing, the increase starting in September 2020 is problematic.

The continued RG exceedances onsite and immediately downgradient indicate that achieving RGs will not happen soon unless the source of contamination is located and remediated, whether it be source material in the vadose zone or NAPL in groundwater. This issue will be addressed in the soil component technical memorandum that will be prepared later under a cooperative agreement executed for the soil component RD. However, if a soil component cooperative agreement has not been executed, the technical memorandum will be prepared as a separate report regardless.



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## Section 5

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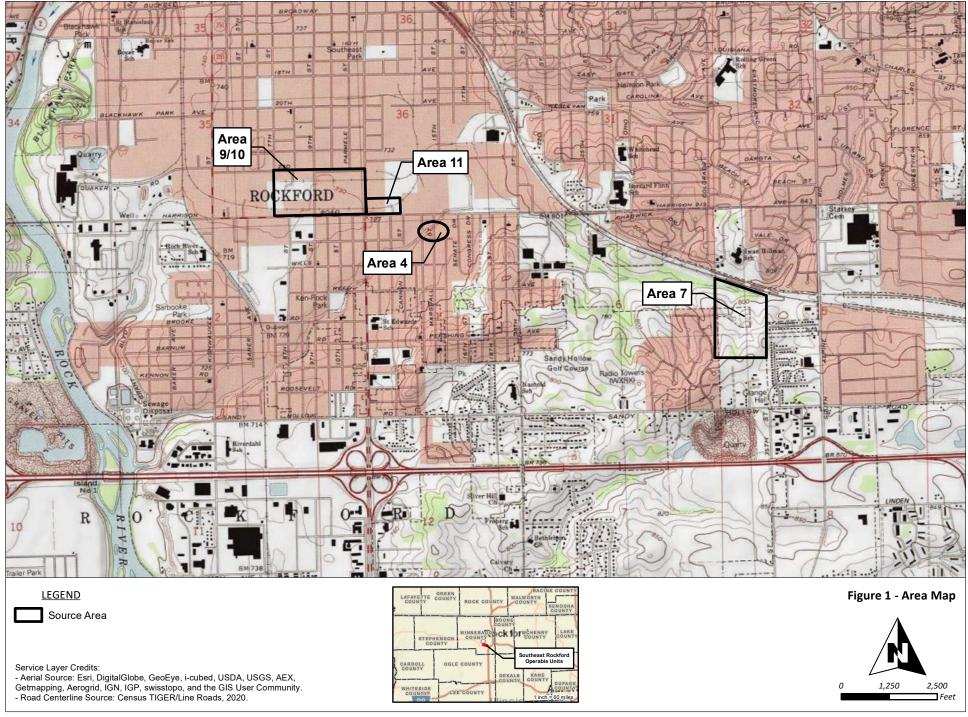
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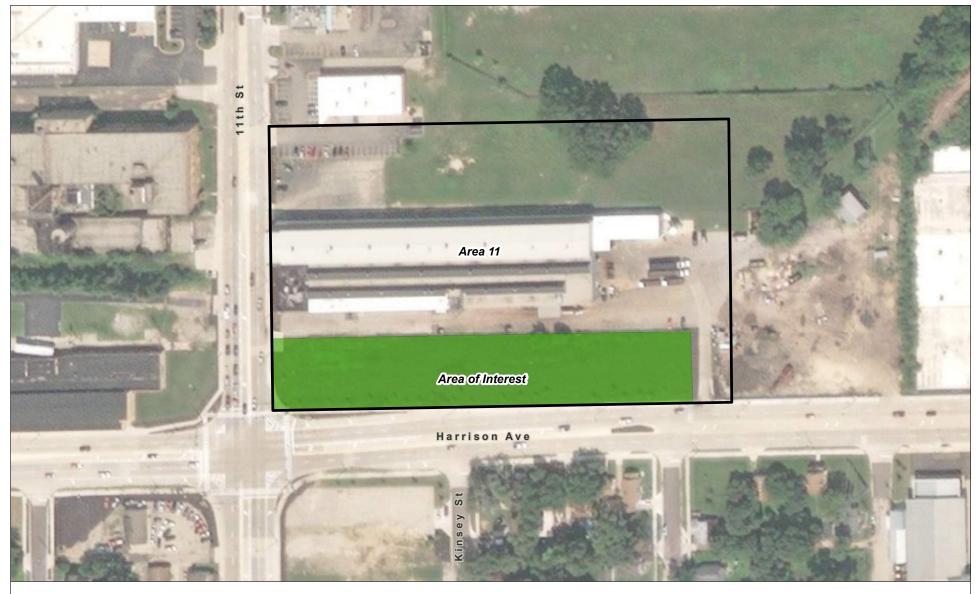
# **Figures**







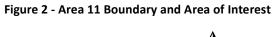




Area 11 Boundary

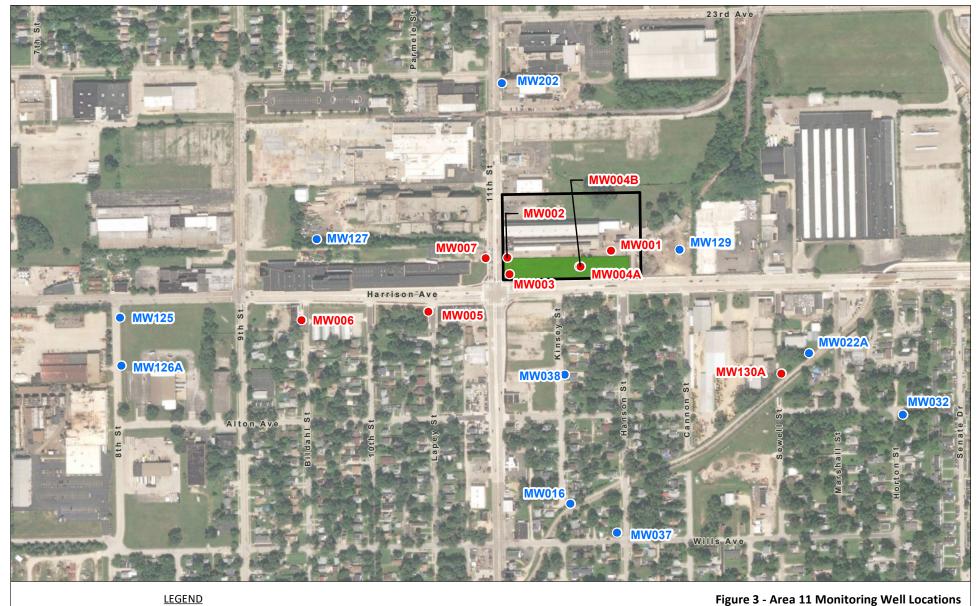
Area of Interest

Service Layer Credits:
- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.
- Road Centerline Source: Census TIGER/Line Roads, 2020.



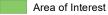






**LEGEND** 

- **Groundwater Sampling Location**
- Area 11 Boundary
- Water Level Measurement Location

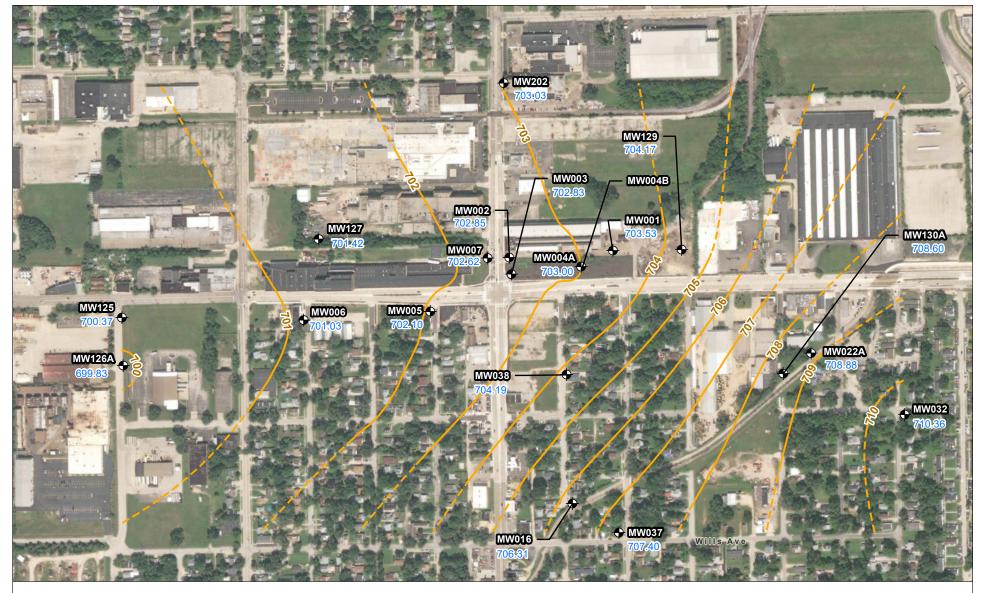




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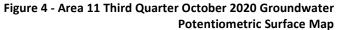


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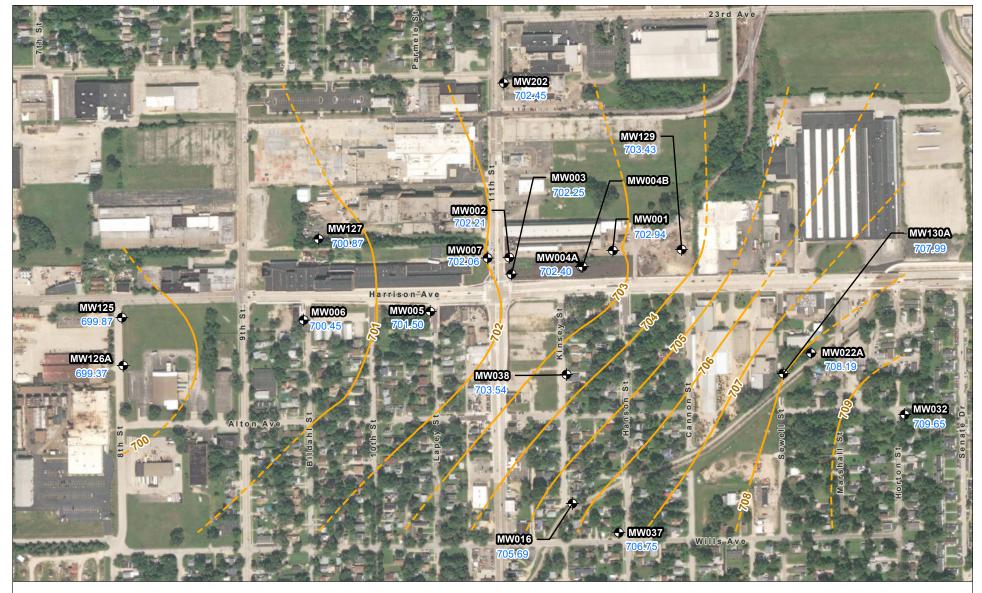
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- Water level measurements taken October 15, 2020.
- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.
   Road Centerline Source: Census TIGER/Line Roads, 2020.









700.00





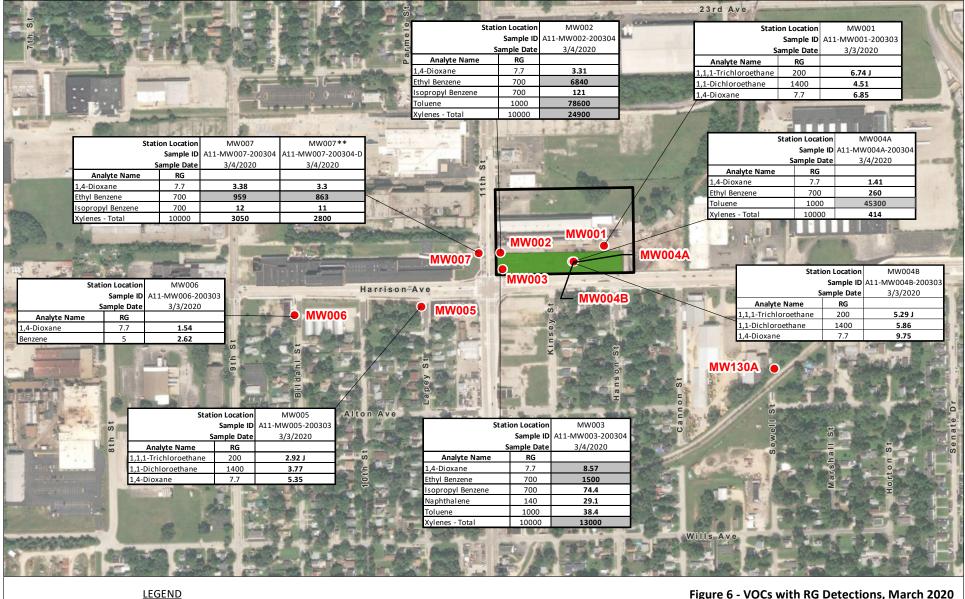
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- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.
  - Road Centerline Source: Census TIGER/Line Roads, 2020.









**LEGEND** 

**Groundwater Sampling Location** 

Area of Interest



Area 11 Boundary

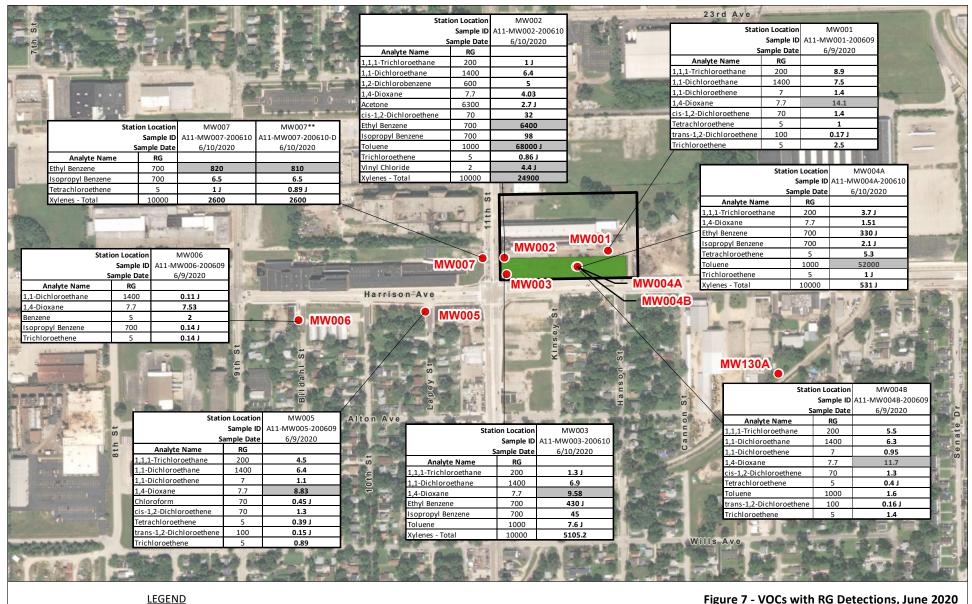
### Notes:

- All results in microgram per liter
- Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410
- Shaded result exceeds remediation goal
- J = Estimated result
- \*\* = Field Duplicate Sample

- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
- Road Centerline Source: Census TIGER/Line Roads, 2020









**Groundwater Sampling Location** 

Area of Interest



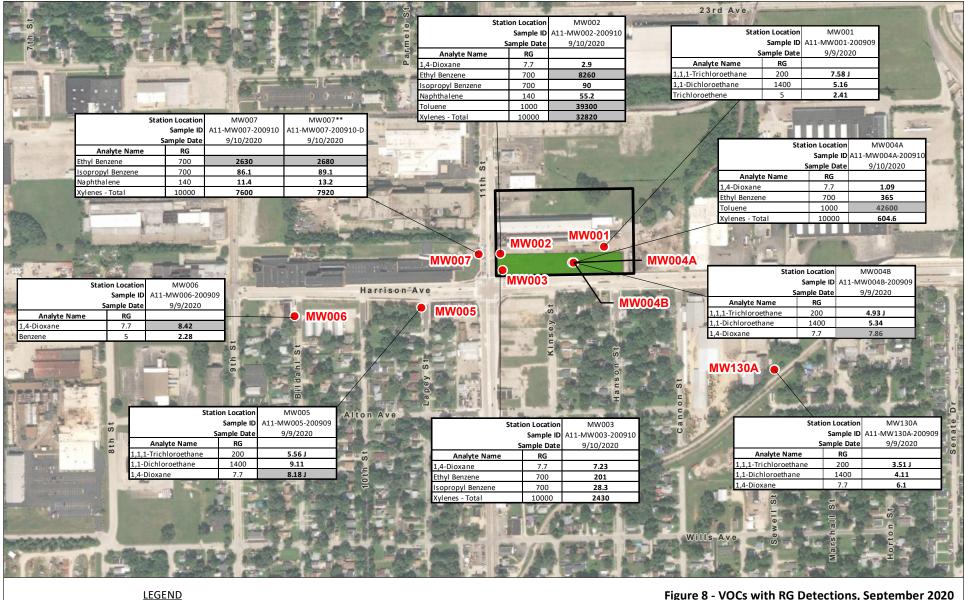
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- Shaded result exceeds remediation goal
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- Road Centerline Source: Census TIGER/Line Roads, 2020

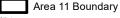






Groundwater Sampling Location

Area of Interest



### Notes:

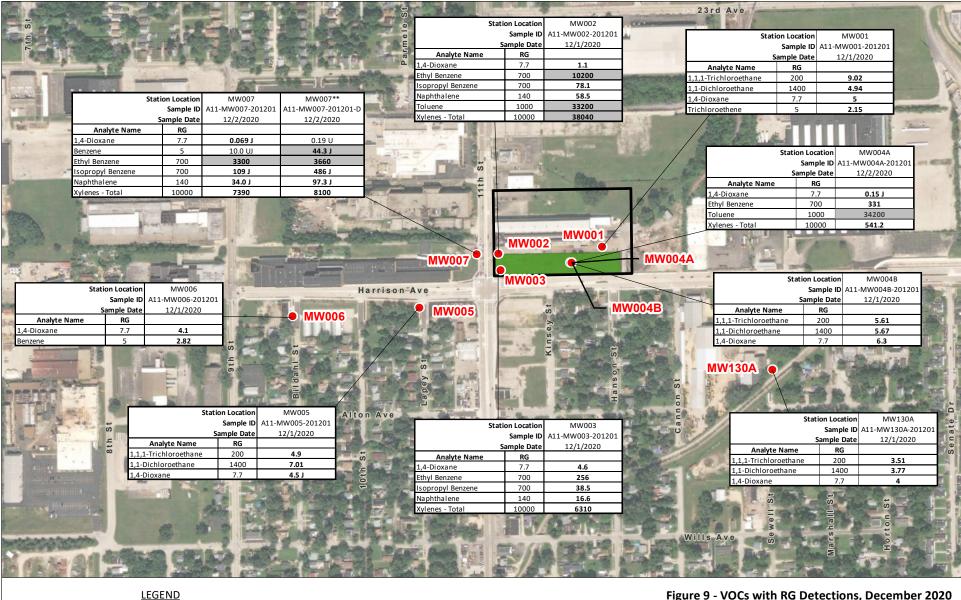
- All results in microgram per liter
- Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410
- Shaded result exceeds remediation goal
- J = Estimated result
- \*\* = Field Duplicate Sample

- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
- Road Centerline Source: Census TIGER/Line Roads, 2020









**LEGEND** 

Groundwater Sampling Location

Area of Interest



### Notes:

- All results in microgram per liter
- Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410
- Shaded result exceeds remediation goal
- J = Estimated result
- \*\* = Field Duplicate Sample

Service Layer Credits:

- Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
- Road Centerline Source: Census TIGER/Line Roads, 2020





Figure 10
Toluene Concentrations in MW004A Since 2011
Source Area 11 2020 Groundwater Report
Southeast Rockford Groundwater Contamination Superfund Site

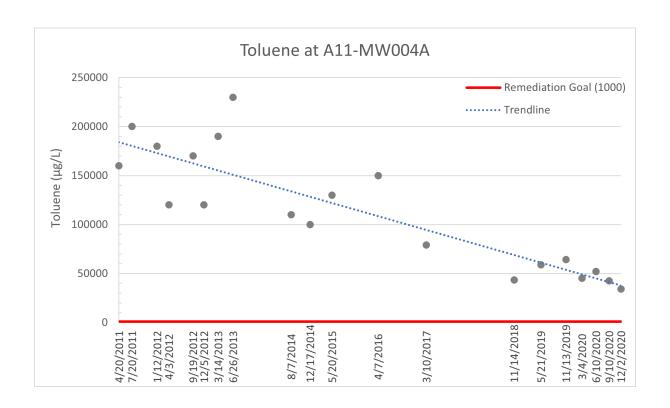
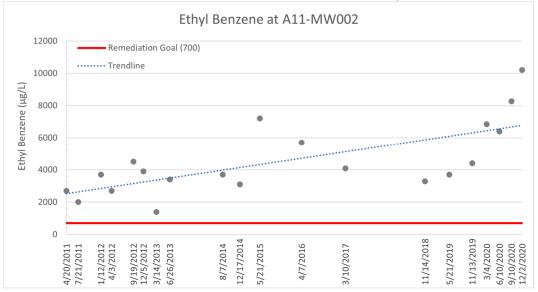
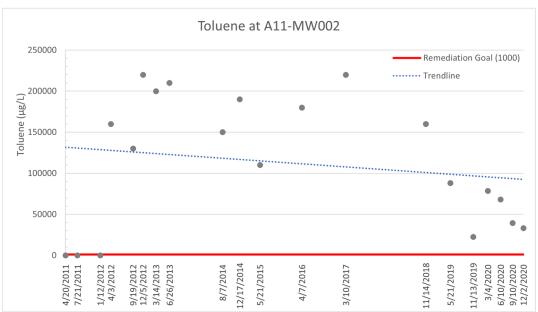


Figure 11
ETX Concentrations in MW002 Since 2011
Source Area 11 2020 Groundwater Report
Southeast Rockford Groundwater Contamination Superfund Site





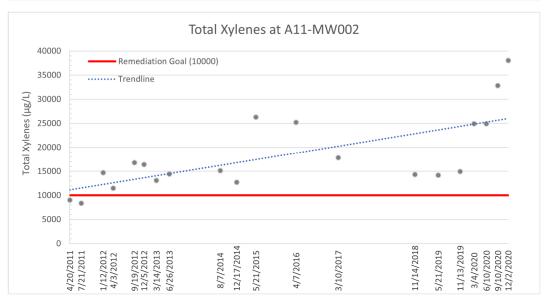
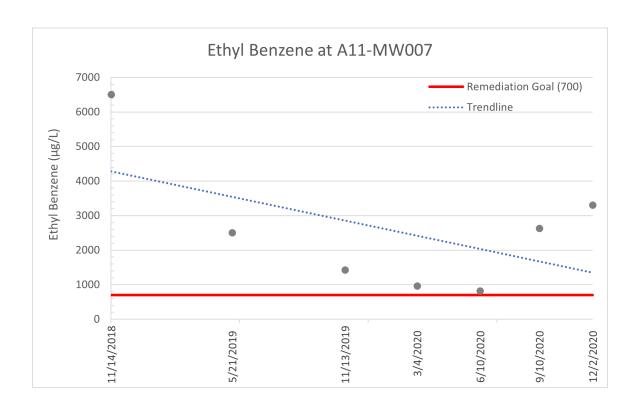


Figure 12
Ethylbenzene Concentrations in MW007 Since 2018
Source Area 11 2020 Groundwater Report
Southeast Rockford Groundwater Contamination Superfund Site







# Table 1 2020 Groundwater Sampling Dates Source Area 11 2020 Groundwater Report

### **Southeast Rockford Groundwater Contamination Superfund Site**

Sampling Event	MW001	MW002	MW003	MW004A	MW004B	MW005	MW006	MW007	MW130A
1 <sup>st</sup> Quarterly 2020	3/3/2020	3/4/2020	3/4/2020	3/4/2020	3/3/2020	3/3/2020	3/3/2020	3/4/2020	NS
2 <sup>nd</sup> Quarterly 2020	6/9/2020	6/10/2020	6/10/2020	6/10/2020	6/9/2020	6/9/2020	6/9/2020	6/10/2020	NS
3 <sup>rd</sup> Quarterly 2020	9/9/2020	9/10/2020	9/10/2020	9/10/2020	9/9/2020	9/9/2020	9/9/2020	9/10/2020	9/9/2020
4 <sup>th</sup> Quarterly 2020	12/1/2020	12/2/2020	12/2/2020	12/2/2020	12/2/2020	12/1/2020	12/1/2020	12/2/2020	12/1/2020

NS – Not Sampled



# Table 2 Source Area 11 Groundwater Monitoring Well Details Source Area 11 2020 Groundwater Report Southeast Rockford Groundwater Contamination Superfund Site

Well Number	Depth to Screen Base from Ground Surface	Ground Surface Elevation	Top of Casing Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Screen Length	Aquifer Screened
MW130A	37.5	728.09	728.04	700.59	690.59	10	unconsolidated
MW001	50	731.44	731.05	691.57	681.57	10	unconsolidated
MW002	50	728.18	727.78	688.36	678.36	10	unconsolidated
MW003	50	728.55	728.11	688.96	678.96	10	unconsolidated
MW004A	40	730.08	729.66	700.12	690.12	10	unconsolidated
MW004B	80	730.39	730.5	660.5	650.5	10	unconsolidated
MW005	48	728.35	727.95	689.95	679.95	10	unconsolidated
MW006	51	727.41	727.05	686.27	676.27	10	unconsolidated
MW007	45	727.8	727.44	692.5	682.5	10	unconsolidated
MW125*	46	727.75	727.75	691.9	681.9	10	unconsolidated
MW126A*	55	727.8	727.84	682.9	672.9	10	unconsolidated
MW127*	42	726.54	728.5	694.7	684.7	10	unconsolidated
MW129*	32	732.11	731.6	705.1	700.1	5	unconsolidated
MW202*	50	729.19	729.06	689.5	679.5	10	unconsolidated
MW16*	53	725.51	725.33	677.8	672.8	5	unconsolidated
MW22A*	38.5	730.67	730.35	702.2	692.2	10	unconsolidated
MW32*	45	734.16	733.84	699.2	689.2	10	unconsolidated
MW-37*	44	725.08	725.05	686.1	681.1	5	unconsolidated
MW38*	48	728.79	728.28	685.2	680.2	5	unconsolidated

Note: \* = Water level only



Table 3
2020 Observed Groundwater Elevations
Source Area 11 2020 Groundwater Report
Southeast Rockford Groundwater Contamination Superfund Site

Well ID	Top of Casing Elevation (ft AMSL)	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft AMSL)						
		March	2, 2020	June 8	3, 2020	October	15, 2020	November 30, 2020	
MW001	731.05	26.92	704.13	26.36	704.70	27.52	703.53	28.11	702.94
MW002	727.78	24.39	703.39	23.78	704.00	24.93	702.85	25.57	702.21
MW003	728.11	24.68	703.43	24.06	704.05	25.28	702.83	25.86	702.25
MW004A	729.66	26.09	703.57	25.46	704.20	26.66	703.00	27.26	702.40
MW004B*	730.50	25.68	704.82	25.10	705.40	26.27	704.23	26.88	703.62
MW005	727.95	25.33	702.62	24.64	703.31	25.85	702.10	26.45	701.50
MW006	727.05	25.49	701.56	24.76	702.29	26.02	701.03	26.60	700.45
MW007	727.44	24.19	703.25	23.59	703.85	24.82	702.62	25.38	702.06
MW130A	728.04	NA	NA	NA	NA	19.44	708.60	20.05	707.99
MW16	725.33	18.60	706.73	17.92	707.41	19.02	706.31	19.64	705.69
MW127	728.50	26.54	701.96	25.82	702.68	27.08	701.42	27.63	700.87
MW129	731.60	26.95	704.65	26.39	705.21	27.43	704.17	28.17	703.43
MW202	729.06	23.39	705.67	24.81	704.25	26.03	703.03	26.61	702.45
MW32	733.84	NA	NA	NA	NA	23.48	710.36	24.19	709.65
MW22A	730.35	NA	NA	NA	NA	21.47	708.88	22.16	708.19
MW37	725.05	NA	NA	22.96	702.09	17.65	707.40	18.30	706.75
MW38	728.28	NA	NA	29.85	698.43	24.09	704.19	24.74	703.54
MW125	727.75	NA	NA	NA	NA	27.38	700.37	27.88	699.87
MW126A	727.84	NA	NA	NA	NA	28.01	699.83	28.47	699.37

### Notes:

\* well not included in potentiometric surface maps

AMSL = above mean sea level

BTOC = below top of casing

ft = feet

NA = not available



# Table 4 2020 Final Stabilized Field Parameter Readings for Monitoring Well Purging Source Area 11 2020 Groundwater Report

### **Southeast Rockford Groundwater Contamination Superfund Site**

	Flowrate mL/min	рН	Specific Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	ORP (mV)	Dissolved Ferrous Iron (mg/L)	Purged Min.		
	•			Mar-20	)						
MW001	NA	7.27	1.41	9.3	5.06	12.08	118	0.04	50		
MW002	NA	6.54	1.36	22	0.83	13.61	-116	1.76	35		
MW003	NA	6.62	1.35	17.7	3.39	12.12	-122	1.32	30		
MW004A	NA	6.74	1.09	5.7	3.53	12.44	-134	2.4	25		
MW004B	NA	7.42	1.18	100	1.66	12.26	37	0.1	50		
MW005	NA	7.47	1.26	20.2	4.6	10.36	70	0.002	55		
MW006	NA	7.38	1.35	0.6	0.78	12.92	-110	1.72	25		
MW007	NA	6.75	0.868	10.1	6.75	10.3	-131	1.8	35		
Jun-20											
MW001	NA	6.75	1.21	58	8.48	17.73	71	0.1	50		
MW002	250	6.65	1.33	19	2.5	17.99	-106	4.58	35		
MW003	400	6.94	1.26	11.1	3.54	15.26	-131	3.48	50		
MW004A	400	7.01	1.12	2.6	5.41	14.22	-272	2.39	50		
MW004B	500	6.78	1.18	26.4	3.11	17.31	5	0.18	35		
MW005	450	6.8	1.43	32.8	5.24	17.71	134	ND	25		
MW006	400	6.8	1.49	4.8	3.11	15.71	-115	3.84	35		
MW007	350	6.94	0.992	4	4.2	16.42	-140	2.39	25		
				Sep-20	)						
MW001	300	6.93	1.28	81	3.84	14.31	64	0.02	45		
MW002	250	6.71	1.37	13.3	0.33	15.73	-116	2.14	40		
MW003	400	7.03	1.26	9.9	0.44	14.13	-140	2.52	45		
MW004A	325	7.13	1.29	9.8	4.5	14.44	-226	1.12	60		
MW004B	300	7.04	1.25	13.1	2.8	14.05	41	ND	55		
MW005	425	7	1.26	10	3.73	14.43	78	ND	50		
MW006	275	6.94	1.36	12.3	0.49	14.88	-133	2.19	30		
MW007	400	6.57	1.94	9.9	0.34	14.82	-126	4.98	45		
MW130A	425	6.69	1.18	9.8	2.44	13.85	24	NA	45		
				Dec-20	)						
MW001	475	8.02	1.19	12	5.69	12.08	20	ND	90		
MW002	350	7.21	1.43	199	0.39	14.18	-109	2.7	60		
MW003	375	7.55	1.34	7	0.62	11.75	-158	3.85	45		
MW004A	330	7.43	1.34	3.6	0.54	12.34	-276	2.61	40		
MW004B	400	7.39	1.4	32	4.15	10.93	94	0.73	65		
MW005	500	7.16	1.49	39.9	4.85	12.84	160	0.03	60		
MW006	500	7.92	1.38	2.7	1.33	12.66	-150	2.96	45		
MW007	450	7.02	1.38	20.7	0.5	12.57	-128	2.86	40		
MW130A	350	7.9	1.17	27.2	2.19	10.71	-21	0.19	60		

NA = Not Available

ND = Non-Detect



### **VOC Compounds Detected 2020**

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW001	A11-MW001	A11-MW001	A11-MW001
	Sample ID	A11-MW001-200303	A11-MW001-200609	A11-MW001-200909	A11-MW001-201201
	Sample Date	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	6.74 J	8.9	7.58 J	9.02
1,1-Dichloroethane	1400	4.51	7.5	5.16	4.94
1,1-Dichloroethene	7	2.00 U	1.4	2.00 U	2.00 U
1,4-Dioxane	7.7	6.85	14.1	0.205 U	5
cis-1,2-Dichloroethene	70	2.00 U	1.4	2.00 U	2.00 U
Tetrachloroethene	5	2.00 U	1	2.00 U	2.00 U
trans-1,2-Dichloroethene	100	2.00 U	0.17 J	2.00 U	2.00 U
Trichloroethene	5	2.00 U	2.5	2.41	2.15

	Station Location	A11-MW002	A11-MW002	A11-MW002	A11-MW002
	Sample ID	A11-MW002-200304	A11-MW002-200610	A11-MW002-200910	A11-MW002-201201
	Sample Date	3/4/2020	6/10/2020	9/10/2020	12/1/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	100 U	1 J	50.0 U	50.0 U
1,1-Dichloroethane	1400	100 U	6.4	50.0 U	50.0 U
1,1-Dichloroethene	7	100 U	5 U	50.0 U	50.0 U
1,2,4-Trimethylbenzene		822	NA	622	588
1,2-Dichlorobenzene	600	100 U	5	50.0 U	50.0 U
1,3,5-Trimethylbenzene		285	NA	202	161
1,4-Dioxane	7.7	3.31	4.03	2.9	1.1
Acetone	6300	625 UJ	2.7 J	312 U	312 U
cis-1,2-Dichloroethene	70	100 U	32	50.0 U	50.0 U
Cyclohexane		NA	120	NA	NA
Ethyl Benzene	700	6840	6400	8260	10200
Isopropyl Benzene	700	121	98	90	78.1
Methyl Acetate		NA	11	NA	NA
Methylcylohexane		NA	570 J	NA	NA
Naphthalene	140	100 U	NA	55.2	58.5
n-Propylbenzene		215	NA	129	87.4
Toluene	1000	78600	68000 J	39300	33200
Trichloroethene	5	100 U	0.86 J	50.0 U	50.0 U
Vinyl Chloride	2	100 U	4.4 J	50.0 U	50.0 U
Xylenes - Total	10000	24900	24900	32820	38040

### Notes:

All results in microgram per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded result exceeds remediation goal

U = Not detected above the reported limit

J = Estimated result

N = Normal Sample



### **VOC Compounds Detected 2020**

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW003	A11-MW003	A11-MW003	A11-MW003
	Sample ID	A11-MW003-200304	A11-MW003-200610	A11-MW003-200910	A11-MW003-201201
	Sample Date	3/4/2020	6/10/2020	9/10/2020	12/1/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	20.0 U	1.3 J	10.0 U	10.0 U
1,1-Dichloroethane	1400	20.0 U	6.9	10.0 U	10.0 U
1,2,4-Trimethylbenzene		329	NA	113	178
1,3,5-Trimethylbenzene		121	NA	34.8	55
1,4-Dioxane	7.7	8.57	9.58	7.23	4.6
4-Methyl 2-Pentanone		50.0 U	2.2 J	25.0 U	25.0 U
Chloroethane		20.0 U	1.9 J	10.0 U	10.0 U
Cyclohexane		NA	7.8	NA	NA
Ethyl Benzene	700	1500	430 J	201	256
Isopropyl Benzene	700	74.4	45	28.3	38.5
Methylcylohexane		NA	59	NA	
Naphthalene	140	29.1	NA	10.0 U	16.6
n-Butylbenzene		23.7	NA	10.0 U	13.1
n-Propylbenzene		76	NA	28.2	37.3
sec-Butylbenzene		27.8	NA	12	15
Toluene	1000	38.4	7.6 J	10.0 U	10.0 U
Xylenes - Total	10000	13000	5105.2	2430	6310

	Station Location	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A
	Sample ID	A11-MW004A-200304	A11-MW004A-200610	A11-MW004A-200910	A11-MW004A-201201
	Sample Date	3/4/2020	6/10/2020	9/10/2020	12/2/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	50.0 U	3.7 J	50.0 U	50.0 U
1,4-Dioxane	7.7	1.41	1.51	1.09	0.15 J
Cyclohexane		NA	0.83 J	NA	NA
Ethyl Benzene	700	260	330 J	365	331
Isopropyl Benzene	700	50.0 U	2.1 J	50.0 U	50.0 U
Methylcylohexane		NA	21	NA	NA
Tetrachloroethene	5	50.0 U	5.3	50.0 U	50.0 U
Toluene	1000	45300	52000	42600	34200
Trichloroethene	5	50.0 U	1 J	50.0 U	50.0 U
Xylenes - Total	10000	414	531 J	604.6	541.2

### Notes:

All results in microgram per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded result exceeds remediation goal

U = Not detected above the reported limit

J = Estimated result

N = Normal Sample



### **VOC Compounds Detected 2020**

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW004B	A11-MW004B	A11-MW004B	A11-MW004B
	Sample ID	A11-MW004B-200303	A11-MW004B-200609	A11-MW004B-200909	A11-MW004B-201201
	Sample Date	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	5.29 J	5.5	4.93 J	5.61
1,1-Dichloroethane	1400	5.86	6.3	5.34	5.67
1,1-Dichloroethene	7	2.00 U	0.95	2.00 U	2.00 U
1,4-Dioxane	7.7	9.75	11.7	7.86	6.3
cis-1,2-Dichloroethene	70	2.00 U	1.3	2.00 U	2.00 U
Tetrachloroethene	5	2.00 U	0.4 J	2.00 U	2.00 U
Toluene	1000	2.00 U	1.6	2.00 UJ	2.00 U
trans-1,2-Dichloroethene	100	2.00 U	0.16 J	2.00 U	2.00 U
Trichloroethene	5	2.00 U	1.4	2.00 U	2.00 U

	Station Location	A11-MW005	A11-MW005	A11-MW005	A11-MW005
	Sample ID	A11-MW005-200303	A11-MW005-200609	A11-MW005-200909	A11-MW005-201201
	Sample Date	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG				
1,1,1-Trichloroethane	200	2.92 J	4.5	5.56 J	4.9
1,1-Dichloroethane	1400	3.77	6.4	9.11	7.01
1,1-Dichloroethene	7	2.00 U	1.1	2.00 UJ	2.00 U
1,4-Dioxane	7.7	5.35	8.83	8.18 J	4.5 J
Bromodichloromethane	0.2*	2.00 U	0.4 J	2.00 U	2.00 U
Chloroform	70	2.00 U	0.45 J	2.00 U	2.00 U
cis-1,2-Dichloroethene	70	2.00 U	1.3	2.00 U	2.00 U
Dibromochloromethane	140*	2.00 U	0.18 J	2.00 U	2.00 U
Tetrachloroethene	5	2.00 U	0.39 J	2.00 UJ	2.00 U
trans-1,2-Dichloroethene	100	2.00 U	0.15 J	2.00 UJ	2.00 U
Trichloroethene	5	2.00 U	0.89	2.00 UJ	2.00 U

	Station Location	A11-MW006	A11-MW006	A11-MW006	A11-MW006
	Sample ID	A11-MW006-200303	A11-MW006-200609	A11-MW006-200909	A11-MW006-201201
	Sample Date	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG				
1,1-Dichloroethane	1400	2.00 U	0.11 J	2.00 U	2.00 U
1,4-Dioxane	7.7	1.54	7.53	8.42	4.1
Benzene	5	2.62	2	2.28	2.82
Chloroethane		2.00 U	0.44 J	2.00 U	2.00 U
Cyclohexane		NA	0.35 J	NA	NA
Isopropyl Benzene	700	2.00 U	0.14 J	2.00 U	2.00 U
Trichloroethene	5	2.00 U	0.14 J	2.00 U	2.00 U

### Notes:

All results in microgram per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded result exceeds remediation goal

U = Not detected above the reported limit

J = Estimated result

N = Normal Sample



### **VOC Compounds Detected 2020**

### Source Area 11 2020 Groundwater Report

### **Southeast Rockford Groundwater Contamination Superfund Site**

	Station Location	A11-MW007	A11-MW007**	A11-MW007	A11-MW007**	A11-MW007	A11-MW007**	A11-MW007	A11-MW007**
	Sample ID	A11-MW007-200304	A11-MW007-200304-D	A11-MW007-200610	A11-MW007-200610-D	A11-MW007-200910	A11-MW007-200910-D	A11-MW007-201201	A11-MW007-201201-D
	Sample Date	3/4/2020	3/4/2020	6/10/2020	6/10/2020	9/10/2020	9/10/2020	12/2/2020	12/2/2020
Analyte Name	RG								
1,2,4-Trimethylbenzene		22.6	21	NA	NA	53.5	55.7	131	169
1,3,5-Trimethylbenzene		4.84	4.57	NA	NA	11.1	11.6	14.4 J	56.7 J
1,4-Dioxane	7.7	3.38	3.3	0.205 U	0.205 U	0.212 U	0.203 U	0.069 J	0.19 U
Benzene	5	4.00 U	4.00 U	5 U	5 U	10.0 U	10.0 U	10.0 UJ	44.3 J
Ethyl Benzene	700	959	863	820	810	2630	2680	3300	3660
Isopropyl Benzene	700	12	11	6.5	6.5	86.1	89.1	109 J	486 J
Methylcylohexane		NA	NA	2.7 J	2.6 J	NA	NA	NA	NA
Naphthalene	140	4.00 U	4.00 U	NA	NA	11.4	13.2	34.0 J	97.3 J
n-Butylbenzene		4.00 U	4.00 U	NA	NA	11.3	12.4	19.9 J	66.9 J
n-Propylbenzene		6.68	6.03	NA	NA	82.4	84.7	104 J	454 J
sec-Butylbenzene		4.00 U	4.00 U	NA	NA	10.8	11.3	17.5 J	68.4 J
Tetrachloroethene	5	4.00 U	4.00 U	1 J	0.89 J	10.0 U	10.0 U	10.0 U	10.0 U
Xylenes - Total	10000	3050	2800	2600	2600	7600	7920	7390	8100

St	tation Location	A11-MW130A	A11-MW130A
	Sample ID	A11-MW130A-200909	A11-MW130A-201201
	Sample Date	9/9/2020	12/1/2020
Analyte Name	RG		
1,1,1-Trichloroethane	200	3.51 J	3.51
1,1-Dichloroethane	1400	4.11	3.77
1,4-Dioxane	7.7	6.1	4

### Notes:

All results in microgram per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded result exceeds remediation goal

U = Not detected above the reported limit

J = Estimated result

N = Normal Sample



### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001	A11-MW001
	EPA Sample ID	E52H2	E52L5	E52R7	E52S7	E3XB9	E3XC9	E3XF8	E3XG8	E3XP2	E3XQ3	E3XX1
	Sample ID	A11-MW001-110419	A11-MW001-110720	A11-MW001-120111	A11-MW001-04/02/2012	A11-MW001-120918	A11-MW001-121204	A11-MW001-130314	A11-MW001-130625	A11-MW001-140806	A11-MW001-141217	A11-MW001-150520
	Sample Date	4/19/2011	7/20/2011	1/11/2012	4/2/2012	9/18/2012	12/4/2012	3/14/2013	6/25/2013	8/6/2014	12/17/2014	5/20/2015
Analyte Name	RG											
1,1,1-Trichloroethane	200	240	210 D	200	210 D	150 J	34	36 D	47 D	15	18	17 J-
1,1,2-Trichloroethane	5	20 U	0.41 J	5 U	0.44 J	5 U	5 U	0.5 U	0.068 J	0.5 U	0.5 UJ	0.5 UJ
1,1-Dichloroethane	1400	24	21	25	18	7.6	2.9 J	4.3	5.7	3	4.1 J	5 J-
1,1-Dichloroethene	7	11 J	11	5 U	11	9.4	5 U	3.2	3.8	1.1 J	2.1	1.9 J-
1,4-Dioxane	7.7	400 R	100 R	100 R	100 R	100 R	100 U	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	20 U	5 U	5 U	5.0 U	5 U	3.8 J	0.5 U	0.5 U	0.5 U	0.5 U	2.3 J-
cis-1,2-Dichloroethene	70	9.4 J	7.9	9.2	5.8	2.9 J	1.4 J	2.3	3	1.5 J	1.6	1.8 J-
Ethyl Benzene	700	20 U	0.25 J	5 U	5.0 U	5 U	5 U	0.14 J	0.12 J	0.18 J	0.5 UJ	0.5 UJ
Isopropyl Benzene	700	20 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.26 J	0.5 U	0.5 UJ	0.5 UJ
Tetrachloroethene	5	3.5 J	3.7 J	4.6 J	4.0 J	4.4 J	2.7 J	1.8	2.8	1.1	1.3 J	1.3 J-
Toluene	1000	20 U	5 U	5 U	0.68 J	0.92 J	5 U	0.5 U	0.52	1 U	0.5 UJ	0.5 UJ
trans-1,2-Dichloroethene	100	20 U	5 U	5 U	5.0 U	5 U	5 U	0.1 J	0.13 J	0.5 U	0.5 U	0.13 J-
Trichloroethene	5	8.6 J	6.1	4.7 J	4.2 J	4.1 J	2.3 J	2.2	4	1.5	1.7 J	2.1 J-
Trichlorofluoromethane (Freon 11)	2100	20 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J-
Vinyl Chloride	2	20 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Xylenes (Total)	10000	40 U	0.5 J	5 U	5 U	5 U	5 U	0.47 J	0.65 J	0.26 J	0.5 UJ	0.5 UJ

	Station Location	A11-MW001	A11-MW001	A11-MW001**	A11-MW001						
	EPA Sample ID	E3XZ8	E3Y44	E3Y45	E3YA2	E3YF1		A11-MW001-200303	E3YG2	A11-MW001-200909	E3YJ1
	Sample ID	A11-MW001-160406	A11-MW001-170309	A11-MW001-170309-D	A11-MW001-181113	A11-MW001-190520	A11-MW001-191112	A11-MW001-200303	A11-MW001-200609	A11-MW001-200909	A11-MW001-201201
	Sample Date	4/6/2016	3/9/2017	3/9/2017	11/13/2018	5/20/2019	11/12/2019	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG										
1,1,1-Trichloroethane	200	17	11	12	9.3	22	7.21	6.74 J	8.9	7.58 J	9.02
1,1,2-Trichloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
1,1-Dichloroethane	1400	6.5	6.2	6.9	9.8	20	5.25	4.51	7.5	5.16	4.94
1,1-Dichloroethene	7	0.5 U	1.4	1.5	1.7	4.6	2.00 U	2.00 U	1.4	2.00 U	2.00 U
1,4-Dioxane	7.7	NA	NA	NA	NA	NA	12.2	6.85	14.1	0.205 U	5
Carbon Tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
cis-1,2-Dichloroethene	70	1.4	1.3	1.4	1.7	3.4	2.00 U	2.00 U	1.4	2.00 U	2.00 U
Ethyl Benzene	700	0.15 J	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Isopropyl Benzene	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 R	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Tetrachloroethene	5	1.2	0.81	0.89	1	2.7	2.00 U	2.00 U	1	2.00 U	2.00 U
Toluene	1000	0.5 U	0.09 J	0.1 J	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 UJ	2.00 U
trans-1,2-Dichloroethene	100	0.17 J	0.14 J	0.16 J	0.25 J	0.46 J	2.00 U	2.00 U	0.17 J	2.00 U	2.00 U
Trichloroethene	5	2.8	2.2	2.4	3.7	4.7	2.00 U	2.00 U	2.5	2.41	2.15
Trichlorofluoromethane (Freon 11)	2100	0.32 J	0.5 U	0.5 U	0.15 J	0.32 J	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Vinyl Chloride	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Kylenes (Total)	10000	0.85	0.5 U	0.11 J	0.5 U	0.3 J+	4.00 U	4.00 U	0.5 U	4.00 U	4.00 U

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown



### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002	A11-MW002
	EPA Sample ID	E52K7	E52N5	E52S4	E52S8	E3XC0	E3XD0	E3XF9	E3XH0	E3XP7	E3XQ7	E3XX5
	Sample ID	A11-MW002-110420	A11-MW002-110721	A11-MW002-120112	A11-MW002-04/03/2012	A11-MW002-120919	A11-MW002-121205	A11-MW002-130314	A11-MW002-130626	A11-MW002-140807	A11-MW002-141217	A11-MW002-150521
	Sample Date	4/20/2011	7/21/2011	1/12/2012	4/3/2012	9/19/2012	12/5/2012	3/14/2013	6/26/2013	8/7/2014	12/17/2014	5/21/2015
Analyte Name	RG											
1,1,1-Trichloroethane	200	5 U	50 U	500 U	250 U	1000 U	4000 U	110 J	34	6300 U	1000 U	73 J-
1,1,2-Trichloroethane	5	10	50 U	500 U	250 U	1000 U	4000 U	5 U	5 U	6300 U	1000 U	1000 UJ
1,1-Dichloroethane	1400	9.5	50 U	500 U	78 J	1000 U	4000 U	76	46	6300 U	1000 U	1000 UJ
1,1-Dichloroethene	7	5 U	50 U	500 U	250 U	1000 U	4000 U	43	5 U	6300 U	1000 U	1000 UJ
1,2,4-Trimethylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	5 U	50 U	500 U	250 U	1000 U	4000 U	5 U	5 U	6300 U	1000 U	1000 UJ
1,2-Dichloropropane	5	7.6	50 U	500 U	250 U	1000 U	4000 U	5 UJ	5 UJ	6300 U	1000 U	1000 UJ
1,3,5-Trimethylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	7.7	100 R	1000 R	10000 R	5000 R	20000 R	80000 U	100 R	100 R	130000 R	20000 R	20000 R
2-Butanone	4200	10 U	100 U	1000 U	500 U	2000 U	8000 U	58	27	13000 U	2000 U	2000 UJ
2-Hexanone		10 U	100 U	1000 U	500 U	2000 U	8000 U	10 U	10 U	13000 U	2000 U	4900 J-D
4-Methyl 2-Pentanone		10 U	100 U	1000 U	500 U	2000 U	8000 U	16	2.2 J	13000 U	2000 U	2000 UJ
Acetone	6300	20 U	100 U	1000 U	1000 U	2000 U	8000 U	10 U	7.1 J	13000 U	2000 U	2000 UJ
Benzene	5	5 U	50 U	500 U	250 U	1000 U	4000 U	5 UJ	5.3	6300 U	1000 U	1000 UJ
Chloroethane		11	50 U	500 U	250 U	1000 U	4000 U	5 U	5 U	6300 UJ	1000 U	1000 UJ
cis-1,2-Dichloroethene	70	5 U	50 U	500 U	100 J	1000 U	4000 U	160	69	6300 U	1000 U	88 J-
Cyclohexane		98	81	500 U	82 J	1000 U	4000 U	100 J	170 J	6300 U	1000 U	1000 UJ
Dichlorodifluoromethane (Freon 12)	1400	5.7	50 U	500 U	250 U	1000 U	4000 U	5 U	5 U	6300 UJ	1000 U	1000 UJ
Ethyl Benzene	700	2700 JD	2000 D	3700	2700	1500	3900 J	1400 J	3400 D	3700 J	3100	7200 J-D
Isopropyl Benzene	700	75	94	500 U	72 J	1000 U	4000 U	53 J	85 J	6300 U	1000 U	77 J-
Methyl Acetate		5 U	50 U	500 U	250 U	1000 U	4000 U	5 U	2.8 J	6300 U	1000 U	1000 UJ
Methylcylohexane		71 JD	420	280 J	340	230 J	4000 U	440 J	590 D	6300 U	1000 U	470 J-
Naphthalene	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	100	5 U	50 U	500 U	250 U	1000 U	4000 U	5 R	5 UJ	6300 U	1000 U	1000 UJ
Tetrachloroethene	5	5 U	50 U	500 U	250 U	1000 U	4000 U	5 R	2.4 J	6300 U	1000 U	1000 UJ
Toluene	1000	110	50 U	NA	160000 D	360 J	220000 D	200000 D	210000 D	150000	190000 D	110000 J-D
Trichloroethene	5	5 U	50 U	500 U	250 U	1000 U	4000 U	5 R	7.6 J	6300 U	1000 U	1000 UJ
Vinyl Chloride	2	5 U	50 U	500 U	250 U	1000 U	4000 U	12	5 U	6300 U	1000 U	1000 UJ
Xylenes (Total)	10000	9010 JD	8371 D	14700	11500	11000	16400	13100	14400	15100	12700	26300

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

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J- = Estimated result biased low J+ = Estimated result biased high

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### Comprehensive VOC Compounds Detected 2011-2020 Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW002								
	EPA Sample ID	E3XZ9	E3Y50	E3YA3	E3YF7		A11-MW002-200304	E3YG8	A11-MW002-200910	A11-MW002-201201
	Sample ID	A11-MW002-160407	A11-MW002-170310	A11-MW002-181114	A11-MW002-190521	A11-MW002-191113	A11-MW002-200304	A11-MW002-200610	A11-MW002-200910	A11-MW002-201201
	Sample Date	4/7/2016	3/10/2017	11/14/2018	5/21/2019	11/13/2019	3/4/2020	6/10/2020	9/10/2020	12/2/2020
Analyte Name	RG									
1,1,1-Trichloroethane	200	190 J	1000 U	250 U	2500 U	200 U	100 U	1 J	50.0 U	50.0 U
1,1,2-Trichloroethane	5	500 U	1000 U	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
1,1-Dichloroethane	1400	500 U	1000 U	250 U	2500 U	200 U	100 U	6.4	50.0 U	50.0 U
I,1-Dichloroethene	7	500 U	1000 UJ	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
1,2,4-Trimethylbenzene		NA	NA	NA	NA	403	822	NA	622	588
1,2-Dichlorobenzene	600	500 U	1000 U	250 U	2500 U	200 U	100 U	5	50.0 U	50.0 U
1,2-Dichloropropane	5	500 U	1000 U	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
1,3,5-Trimethylbenzene		NA	NA	NA	NA	200 U	285	NA	202	161
1,4-Dioxane	7.7	NA	NA	NA	NA	4.42	3.31	4.03	2.9	1.1
2-Butanone	4200	1000 U	2000 U	500 U	5000 U	NA	625 U	10 U	312 U	312 U
2-Hexanone		1000 U	2000 U	500 U	5000 U	NA	250 U	10 U	125 U	125 U
4-Methyl 2-Pentanone		1000 U	2000 U	500 U	5000 U	NA	250 U	10 U		125 U
Acetone	6300	1000 U	2000 U	500 U	5000 U	NA	625 UJ	2.7 J	312 U	312 U
Benzene	5	500 U	1000 U	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
Chloroethane		500 U	1000 U	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
cis-1,2-Dichloroethene	70	140 J	1000 UJ	170 J	2500 U	200 U	100 U	32	50.0 U	50.0 U
Cyclohexane		500 U	1000 U	110 J	2500 U	NA	NA	120	NA	NA
Dichlorodifluoromethane (Freon 12)	1400	500 U	1000 U	250 U	2500 U	200 UJ	100 U	5 U	50.0 UJ	50.0 U
Ethyl Benzene	700	5700	4100	3300	3700	4420 J	6840	6400	8260	10200
Isopropyl Benzene	700	500 U	1000 U	93 J	2500 U	200 U	121	98	90	78.1
Methyl Acetate		500 U	1000 U	250 U	2500 U	NA	NA	11	NA	NA
Methylcylohexane		440 J	530 J	780	780 J	NA	NA	570 J	NA	NA
Naphthalene	140	NA	NA	NA	NA	200 U	100 U	NA	55.2	58.5
n-Propylbenzene		NA	NA	NA	NA	200 U	215	NA	129	87.4
Styrene	100	500 U	1000 U	250 U	2500 U	371	100 U	5 U	50.0 U	50.0 U
Tetrachloroethene	5	500 U	1000 U	250 U	2500 U	200 U	100 U	5 U	50.0 U	50.0 U
Toluene	1000	180000 J	220000 J	160000 J	88000	22500 J	78600	68000 J	39300	33200
Trichloroethene	5	500 U	1000 U	250 U	2500 U	200 U	100 U	0.86 J	50.0 U	50.0 U
Vinyl Chloride	2	500 U	1000 U	250 U	2500 U	200 U	100 U	4.4 J	50.0 U	50.0 U
Xylenes (Total)	10000	25200	17800	3300	14200	14930 J	24900	24900	32820	38040

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

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### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003	A11-MW003
	EPA Sample ID	E52K8	E52N6	E52S3	E52S9	E3XC1	E3XD1	E3XG0	E3XG9	E3XP8	E3XQ8	E3XX6
	Sample ID	A11-MW003-110420	A11-MW003-110721	A11-MW003-1201112	A11-MW003-04/03/2012	A11-MW003-120919	A11-MW003-121205	A11-MW003-130314	A11-MW003-130626	A11-MW003-140807	A11-MW003-141217	A11-MW003-150520
	Sample Date	4/20/2011	7/21/2011	1/12/2012	4/3/2012	9/19/2012	12/5/2012	3/14/2013	6/26/2013	8/7/2014	12/17/2014	5/20/2015
Analyte Name	RG											
1,1,1-Trichloroethane	200	1000 U	27	200 U	50 U	5000 U	130 U	130 U	7.4	130 U	50 U	50 UJ
1,1-Dichloroethane	1400	1000 U	20	200 U	11 J	5000 U	130 U	130 U	9.2	130 U	5.5 J	4.8 J-
1,1-Dichloroethene	7	130 J	10 U	200 U	50 U	5000 U	130 U	130 U	5 U	130 U	50 U	50 UJ
1,2,4-Trimethylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	7.7	9300 J	200 R	4000 R	1000 R	100000 R	2500 U	2500 R	100 R	2500 R	1000 R	1000 R
2-Chlorotoluene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl 2-Pentanone		2000 U	20 U	400 U	100 U	10000 U	250 U	250 U	10 U	250 U	100 U	100 UJ
Acetone	6300	4000 U	40 U	400 U	100 U	10000 U	250 U	250 U	10 U	250 U	100 U	100 UJ
Chloroethane		1000 U	10 U	200 U	50 U	5000 U	130 U	130 U	4.2 J	130 U	50 U	50 UJ
cis-1,2-Dichloroethene	70	1000 U	2.7 J	200 U	50 U	5000 U	130 U	130 U	1.3 J	130 U	50 U	50 UJ
Cyclohexane		1000 U	4.7 J	200 U	10 J	5000 U	130 U	130 U	5 U	130 U	50 U	50 UJ
Ethyl Benzene	700	1200	420 D	3000	1300	4500 J	300	92 J	40 J	730	78	320 J-
Isopropyl Benzene	700	1000 U	31	85 J	66	5000 U	130 U	53 J	58	130 U	36 J	51 J-
Methylcylohexane		1000 U	35	160 J	91	5000 U	140	140	160	380	250	50 UJ
Methylene Chloride	5	1000 U	0.65 J	200 U	100 U	5000 U	5 U	130 U	5 U	130 U	50 U	100 UJ
Naphthalene	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	1000	1000	10 U	1000	550	130000	980	130 U	32 J	620	96	160 J-
Trichloroethene	5	1000 U	10 U	200 U	50 U	5000 U	130 U	130 U	0.53 J	130 U	50 U	50 UJ
Xylenes (Total)	10000	5400 J	3003	12200 D	11025 D	16800	9830	4200	1400 D	3200	1200	4300 DJ-

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

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U = Not detected at value shown

J = Estimated result

J- = Estimated result biased low J+ = Estimated result biased high



### Comprehensive VOC Compounds Detected 2011-2020 Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW003								
	EPA Sample ID	E3Y00	E3Y51	E3YA4	E3YF4		A11-MW003-200304	E3YG5	A11-MW003-200910	A11-MW003-201201
	Sample ID	A11-MW003-160407	A11-MW003-170310	A11-MW003-181114	A11-MW003-190521	A11-MW003-191113	A11-MW003-200304	A11-MW003-200610	A11-MW003-200910	A11-MW003-201201
	Sample Date	4/7/2016	3/10/2017	11/14/2018	5/21/2019	11/13/2019	3/4/2020	6/10/2020	9/10/2020	12/2/2020
Analyte Name	RG									
1,1,1-Trichloroethane	200	2.3 J	250 U	100 U	250 U	10.0 U	20.0 U	1.3 J	10.0 U	10.0 U
1,1-Dichloroethane	1400	5.3	250 U	100 U	250 U	10.0 U	20.0 U	6.9	10.0 U	10.0 U
I,1-Dichloroethene	7	5 UJ	250 U	100 U	250 U	10.0 U	20.0 U	5 U	10.0 U	10.0 U
1,2,4-Trimethylbenzene		NA	NA	NA	NA	137	329	NA	113	178
1,3,5-Trimethylbenzene		NA	NA	NA	NA	47.1	121	NA	34.8	55
1,4-Dioxane	7.7	NA	NA	NA	NA	12	8.57	9.58	7.23	4.6
2-Chlorotoluene		NA	NA	NA	NA	10.3	20.0 U	NA	10.0 U	10.0 U
1-Methyl 2-Pentanone		10 U	500 U	200 U	500 U	NA	50.0 U	2.2 J	25.0 U	25.0 U
Acetone	6300	10 U	500 U	200 U	78 J	NA	125 UJ	10 U	62.5 U	62.5 U
Chloroethane		5 U	250 U	100 U	250 U	10.0 U	20.0 U	1.9 J	10.0 U	10.0 U
cis-1,2-Dichloroethene	70	1.2 J-	250 U	100 U	250 U	10.0 U	20.0 U	5 U	10.0 U	10.0 U
Cyclohexane		1.8 J	250 U	100 U	250 U	NA	NA	7.8	NA	NA
Ethyl Benzene	700	33	450	130	160 J	144	1500	430 J	201	256
sopropyl Benzene	700	6.4	250 U	100 U	57 J	31.7	74.4	45	28.3	38.5
Methylcylohexane		43	250 U	100 U	110 J	NA	NA	59	NA	NA
Methylene Chloride	5	5 U	250 U	100 U	250 U	10.0 U	20.0 U	5 U	10.0 U	10.0 U
Naphthalene	140	NA	NA	NA	NA	13.8	29.1	NA	10.0 U	16.6
n-Butylbenzene		NA	NA	NA	NA	10.0 U	23.7	NA	10.0 U	13.1
n-Propylbenzene		NA	NA	NA	NA	33.6	76	NA	28.2	37.3
ec-Butylbenzene		NA	NA	NA	NA	10.0 U	27.8	NA	12	15
Toluene	1000	23	190 J	54 J	570	133	38.4	7.6 J	10.0 U	10.0 U
Trichloroethene	5	5 U	250 U	100 U	250 U	10.0 U	20.0 U	5 U	10.0 U	10.0 U
(ylenes (Total)	10000	392.2 J	4900	3500	12000	2910	13000	5105.2	2430	6310

	Station Location	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A
	EPA Sample ID	E52K9	E52N1	E52S2	E52T0	E3XC2	E3XD2	E3XG1	E3XH1	E3XP9	E3XQ9	E3XX7
	Sample ID	A11-MW004A-110420	A11-MW004A-110720	A11-MW004A-120112	A11-MW004A-04/03/2012	A11-MW004A-120919	A11-MW004A-121205	A11-MW004A-130314	A11-MW004A-130626	A11-MW004A-140807	A11-MW004A-141217	A11-MW004A-150520
	Sample Date	4/20/2011	7/20/2011	1/12/2012	4/3/2012	9/19/2012	12/5/2012	3/14/2013	6/26/2013	8/7/2014	12/17/2014	5/20/2015
Analyte Name	RG											
1,1,1-Trichloroethane	200	10000 U	1000 U	2500 U	40 J	5000 U	1000 U	500 U	42	5000 U	1000 U	1000 UJ
1,1-Dichloroethane	1400	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	2 J	5000 U	1000 U	1000 UJ
1,1-Dichloroethene	7	1100 J	1000 U	2500 U	250 U	5000 U	1000 U	500 U	9.4	5000 U	1000 U	1000 UJ
1,4-Dioxane	7.7	200000 R	20000 R	50000 R	5000 R	100000 R	20000 U	10000 R	100 R	100000 R	20000 R	20000 R
2-Butanone	4200	20000 U	2000 U	5000 U	500 U	10000 U	2000 U	1000 U	1.2 J	10000 U	2000 U	2000 UJ
Acetone	6300	40000 U	4000 U	5000 U	500 U	10000 U	2000 U	1000 U	2 J	10000 U	2000 U	2000 UJ
cis-1,2-Dichloroethene	70	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	17	5000 U	1000 U	1000 UJ
Cyclohexane		10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	5 U	5000 U	1000 U	1000 UJ
Ethyl Benzene	700	10000 U	240 J	3000	400	5000 U	430 J	1100	810 D	5000 U	220 J	420 J-
Isopropyl Benzene	700	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	7.1 J	5000 U	1000 U	1000 UJ
Methylcylohexane		10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	28 J	5000 U	1000 U	1000 UJ
Styrene	100	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	5 UJ	5000 U	1000 U	1000 UJ
Tetrachloroethene	5	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	37 J	5000 U	1000 U	1000 UJ
Toluene	1000	160000	200000 D	180000 D	120000 D	170000	120000 D	190000 D	230000 D	110000	100000 D	130000 J-D
Trichloroethene	5	10000 U	1000 U	2500 U	250 U	5000 U	1000 U	500 U	5.8 J	5000 U	1000 U	1000 UJ
Xylenes (Total)	10000	10000 U	419 J	12400	707 J	2100 J	2250 J	4570	3660	3900 J	430 J	98 J-

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

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### Comprehensive VOC Compounds Detected 2011-2020 Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A**	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A	A11-MW004A
	EPA Sample ID	E3Y01	E3Y52	E3YA6	E3YA7	E3YF8		A11-MW004A-200304	E3YG9	A11-MW004A-200910	A11-MW004A-201201
	Sample ID	A11-MW004A-160407	A11-MW004A-170310	MW004A-181115	MW004A-181115-D	A11-MW004A-190521	A11-MW004A-191113	A11-MW004A-200304	A11-MW004A-200610	A11-MW004A-200910	A11-MW004A-201201
	Sample Date	4/7/2016	3/10/2017	11/14/2018	11/14/2018	5/21/2019	11/13/2019	3/4/2020	6/10/2020	9/10/2020	12/2/2020
Analyte Name	RG										
1,1,1-Trichloroethane	200	21	250 U	2500 U	2500 U	250 U	400 U	50.0 U	3.7 J	50.0 U	50.0 U
1,1-Dichloroethane	1400	1.3 J	250 U	2500 U	2500 U	250 U	400 U	50.0 U	5 U	50.0 U	50.0 U
1,1-Dichloroethene	7	5 U	250 UJ	2500 UJ	2500 UJ	250 U	400 U	50.0 U	5 U	50.0 U	50.0 U
1,4-Dioxane	7.7	NA	NA	NA	NA	NA	1.2	1.41	1.51	1.09	0.15 J
2-Butanone	4200	10 U	500 U	25000 U	25000 U	500 U	NA	312 U	10 U	312 U	312 U
Acetone	6300	10 U	500 U	25000 U	25000 U	99 J	NA	312 UJ	10 U	312 U	312 U
cis-1,2-Dichloroethene	70	14	250 UJ	2500 UJ	2500 UJ	250 U	400 U	50.0 U	5 U	50.0 U	50.0 U
Cyclohexane		5 U	250 U	2500 U	2500 U	250 U	NA	NA	0.83 J	NA	NA
Ethyl Benzene	700	440 J	320	2500 U	2500 U	440	455	260	330 J	365	331
Isopropyl Benzene	700	4 J-	250 U	2500 U	2500 U	250 U	400 U	50.0 U	2.1 J	50.0 U	50.0 U
Methylcylohexane		22	250 U	2500 U	2500 U	250 U	NA	NA	21	NA	NA
Styrene	100	5 UJ	250 U	2500 U	2500 U	250 U	400 U	50.0 U	5 U	50.0 U	50.0 U
Tetrachloroethene	5	18 J-	250 U	2500 U	2500 U	250 U	400 U	50.0 U	5.3	50.0 U	50.0 U
Toluene	1000	150000 J	79000	48000	39000	59000	64300	45300	52000	42600	34200
Trichloroethene	5	8.8 J-	250 U	2500 U	2500 U	250 U	400 U	50.0 U	1 J	50.0 U	50.0 U
Xylenes (Total)	10000	1140 D	539 J	2500 U	2500 U	706 J	800 U	414	531 J	604.6	541.2

	Station Location	A11-MW004B	A11-MW004B	A11-MW004B	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**
	EPA Sample ID	E52L0	E52N2	E52S1	E52T1	E52T6	E3XC3	E3XC4	E3XD3	E3XD4	E3XG2	E3XG3
	Sample ID	A11-MW004B-110420	A11-MW004B-110720	A11-MW004B-120112	A11-MW004B-04/03/2012	A11-MW004B-04/03/2012D	A11-MW004B-120919	A11-MW004B-120919-D	A11-MW004B-121204	A11-MW004B-121204-D	A11-MW004B-130314	A11-MW004B-130314-D
	Sample Date	4/20/2011	7/20/2011	1/12/2012	4/3/2012	4/3/2012	9/18/2012	9/18/2012	12/4/2012	12/4/2012	3/14/2013	3/14/2013
Analyte Name	RG											
1,1,1-Trichloroethane	200	190 J	98	74	59	58	64	64	26	38	24 D	35 D
1,1,2-Trichloroethane	5	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U
1,1-Dichloroethane	1400	20 J	13	11	9	9.1	8.2	8.5	6.7	8.3	5.9	5.9
1,1-Dichloroethene	7	6.6 J	5.3	5 U	3.7 J	4.0 J	5 U	5 U	5 U	5 U	2.1	2.2
1,4-Dioxane	7.7	400 R	100 R	100 R	100 R	100 R	100 R	100 R	100 U	100 U	NA	NA
Acetone	6300	80 UJ	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5 U	5 U
Benzene	5	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 UJ	5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	70	7.8 J	5.1	5.9	4.1 J	4.0 J	4.2 J	4.4 J	3.3 J	3.9 J	2.9	2.9
Dichlorodifluoromethane (Freon 12)	1400	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U
Ethyl Benzene	700	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.15 J	0.16 J
Tetrachloroethene	5	20 UJ	0.4 J	5 U	0.67 J	0.55 J	0.61 J	0.79 J	5 U	5 U	0.39 J	0.36 J
Toluene	1000	20 UJ	5 U	5 U	3.0 J	2.8 J	0.75 J	0.94 J	5 U	2.1 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	100	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.13 J	0.13 J
trans-1,3-Dichloropropene		20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U
Trichloroethene	5	4 J	2.7 J	3.4 J	3.0 J	2.9 J	3.5 J	3.6 J	1.9 J	2.4 J	1.9	1.8
Trichlorofluoromethane (Freon 11)	2100	20 UJ	5 U	5 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	0.21 J	0.18 J
Xylenes (Total)	10000	20 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.69 J	0.67 J

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown



### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B	A11-MW004B**	A11-MW004B
	EPA Sample ID	E3XH2	E3XH3	E3XP3	E3XP4	E3XQ4RE	E3XQ5RE	E3XX2	E3XX3	E3Y02	E3Y03	E3Y48
	Sample ID	A11-MW004B-130626	A11-MW004B-130626-D	A11-MW004B-140807	A11-MW004B-140807-D	A11-MW004B-141217RE	A11-MW004B-141217-DRE	A11-MW004B-150520	A11-MW004B-150520-D	A11-MW004B-160406	A11-MW004B-160406-D	A11-MW004B-170310
	Sample Date	6/26/2013	6/26/2013	8/7/2014	8/7/2014	12/17/2014	12/17/2014	5/20/2015	5/20/2015	4/6/2016	4/6/2016	3/10/2017
Analyte Name	RG											
1,1,1-Trichloroethane	200	25 D	27 D	14	14	15 J	16	14 J-	15 J-	12	11	12
1,1,2-Trichloroethane	5	0.066 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	1400	7.1	7.6	6.3	6.2	8.7	9.4	9 J-	9.2 J-	8.8	9.8	10
1,1-Dichloroethene	7	2.5	2.8	1.2 J	1.2 J	2.5	2	1.6 J-	1.6 J-	0.5 U	0.5 U	1.8
1,4-Dioxane	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	6300	10 U	10 U	5 U	5 U	10 U	10 U	5 UJ	5 UJ	5 U	5 U	5 U
Benzene	5	0.086 J	0.078 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	70	3	3.2	1.8 J	1.7 J	2.2	2.2	2.1 J-	2.1 J-	2	2.2	2.1
Dichlorodifluoromethane (Freon 12)	1400	2.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Ethyl Benzene	700	0.16 J	0.17 J	0.2 J	0.19 J	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	0.64	0.67	0.49 J	0.45 J	0.61	0.59	0.53 J-	0.53 J-	0.57	0.47 J	0.55
Toluene	1000	0.8	0.84	1 U	1 U	590 U	590 U	1.4 UJ	1.4 UJ	8	7.9	0.1 J
trans-1,2-Dichloroethene	100	0.21 J	0.21 J	0.16 J	0.13 J	0.24 J	0.25 J	0.26 J-	0.25 J-	0.25 J	0.22 J	0.23 J
trans-1,3-Dichloropropene		0.18 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichloroethene	5	2.6	2.9	2.1	2.2	2	2	2.1 J-	2.2 J-	2.6	2.3	2
Trichlorofluoromethane (Freon 11)	2100	0.36 J	0.37 J	0.33 J	0.33 J	0.52 J	0.43 J	0.53 J-	0.51 J-	0.38 J	0.36 J	0.5 U
Xylenes (Total)	10000	1.01 J	1.1 J	0.31 J	0.3 J	110 U	110 U	0.5 UJ	0.5 UJ	0.38 J	0.14 J	0.11 J

	Station Location	A11-MW004B						
	EPA Sample ID	E3YA5	E3YF2		A11-MW004B-200303	E3YG3	A11-MW004B-200909	E3YJ0
	Sample ID	A11-MW004B-181114	A11-MW004B-190520	A11-MW004B-191112	A11-MW004B-200303	A11-MW004B-200609	A11-MW004B-200909	A11-MW004B-201201
	Sample Date	11/15/2018	5/20/2019	11/12/2019	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG							
1,1,1-Trichloroethane	200	8.9	18	6.26	5.29 J	5.5	4.93 J	5.61
1,1,2-Trichloroethane	5	5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
1,1-Dichloroethane	1400	11	20	6.55	5.86	6.3	5.34	5.67
1,1-Dichloroethene	7	5 U	3.2	2.00 U	2.00 U	0.95	2.00 U	2.00 U
1,4-Dioxane	7.7	NA	NA	13.4	9.75	11.7	7.86	6.3
Acetone	6300	4.5 J	6.1 U	NA	12.5 UJ	5 U	12.5 U	12.5 U
Benzene	5	5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
cis-1,2-Dichloroethene	70	1.8 J	3.8	2.00 U	2.00 U	1.3	2.00 U	2.00 U
Dichlorodifluoromethane (Freon 12)	1400	5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Ethyl Benzene	700	5 U	0.5 UJ	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Tetrachloroethene	5	5 U	0.93 J-	2.00 U	2.00 U	0.4 J	2.00 U	2.00 U
Toluene	1000	1.6 J	0.5 UJ	2.00 U	2.00 U	1.6	2.00 UJ	2.00 U
trans-1,2-Dichloroethene	100	5 U	0.52	2.00 U	2.00 U	0.16 J	2.00 U	2.00 U
trans-1,3-Dichloropropene		5 U	0.5 U	2.00 U	2.00 UJ	0.5 U	2.00 U	2.00 U
Trichloroethene	5	1.6 J	3.1 J-	2.00 U	2.00 U	1.4	2.00 U	2.00 U
Trichlorofluoromethane (Freon 11)	2100	5 U	0.29 J	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Xylenes (Total)	10000	5 U	0.77 J	4.00 U	4.00 U	0.5 U	4.00 U	4.00 U

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown

J = Estimated result

J- = Estimated result biased low J+ = Estimated result biased high



### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW005	A11-MW005**	A11-MW005	A11-MW005**	A11-MW005	A11-MW005	A11-MW005	A11-MW005	A11-MW005	A11-MW005	A11-MW005
	EPA Sample ID	E52H3	E52H4	E52L6	E52L7	E52S0	E52T2	E3XC5	E3XD5	E3XG4	E3XH4	E3XP1
	Sample ID	A11-MW005-110419	A11-MW005-110419-D	A11-MW005-110720	A11-MW005-110720-D	A11-MW005-120111	A11-MW005-04/02/2012	A11-MW005-120918	A11-MW005-121204	A11-MW005-130313	A11-MW005-130625	A11-MW005-140806
	Sample Date	4/19/2011	4/19/2011	7/20/2011	7/20/2011	1/11/2012	4/2/2012	9/18/2012	12/4/2012	3/13/2013	6/25/2013	8/6/2014
Analyte Name	RG											
1,1,1-Trichloroethane	200	67	69	38	38	15	16	19	12	13	11	3.6
1,1-Dichloroethane	1400	15	15	13	13	7	8.1	7.4	9.5	7.8	7.3	2.8
1,1-Dichloroethene	7	5 U	25 U	3.6 J	3.8 J	5 U	2.4 J	5 U	5 U	1.8	0.5 U	1 U
1,4-Dioxane	7.7	21 J	17 J	100 R	100 R	100 R	100 R	100 R	100 U	NA	NA	NA
Benzene	5	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.096 J	0.5 U
Bromodichloromethane	0.2*	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chloroform	70	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	70	6	6	4.6 J	4.7 J	3.2 J	2.9 J	2.6 J	3.5 J	3.2	2.7	1.4 J
Dibromochloromethane	140*	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	1400	2.5 J	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Ethyl Benzene	700	5 U	5 U	0.18 J	0.23 J	5 U	0.80 J	5 U	5 U	0.14 J	0.18 J	0.25 J
Isopropyl Benzene	700	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	5	5 U	5 U	0.4 J	0.41 J	5 U	0.45 J	5 U	5 U	0.29 J	0.41 J	0.23 J
Toluene	1000	5 U	5 U	5 U	5 U	5 U	1.8 J	0.66 J	5 U	0.5 U	0.82	1 U
trans-1,2-Dichloroethene	100	5 U	5 U	0.5 J	5 U	5 U	5.0 U	5 U	5 U	0.18 J	0.19 J	0.5 U
Trichloroethene	5	1.8 J	1.7 J	1.4 J	1.4 J	5 U	0.95 J	1.2 J	5 U	0.97	1.3 J	0.5
Trichlorofluoromethane (Freon 11)	2100	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Xylenes (Total)	10000	5 U	5 U	0.31 J	0.49 J	5 U	0.42 J	5 U	5 U	0.43 J	0.92 J	0.35 J

	Station Location	A11-MW005									
	EPA Sample ID	E3XQ2	E3XX0	E3Y04	E3YA8	E3YF0		A11-MW005-200303	E3YG1	A11-MW005-200909	E3YH9
	Sample ID	A11-MW005-141217	A11-MW005-150519	A11-MW005-160406	A11-MW005-181113	A11-MW005-190520	A11-MW005-191112	A11-MW005-200303	A11-MW005-200609	A11-MW005-200909	A11-MW005-201201
	Sample Date	12/17/2014	5/19/2015	4/6/2016	11/13/2018	5/20/2019	11/12/2019	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG										
1,1,1-Trichloroethane	200	5.4	6.1 J-	4.4	3.5	6.4	2.46	2.92 J	4.5	5.56 J	4.9
1,1-Dichloroethane	1400	3.6	2.9 J-	2.8	3.8	7.2	3.21	3.77	6.4	9.11	7.01
1,1-Dichloroethene	7	1.3	0.88 J-	0.5 U	0.5 UJ	1.1	2.00 U	2.00 U	1.1	2.00 UJ	2.00 U
1,4-Dioxane	7.7	NA	NA	NA	NA	NA	7.63	5.35	8.83	8.18 J	4.5 J
Benzene	5	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Bromodichloromethane	0.2*	0.5 UJ	0.5 UJ	0.12 J	0.12 J	0.33 J	2.00 U	2.00 U	0.4 J	2.00 U	2.00 U
Chloroform	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.45 J	2.00 U	2.00 U
cis-1,2-Dichloroethene	70	2.1	2.1 J-	1.9	0.85 J-	1.6	2.00 U	2.00 U	1.3	2.00 U	2.00 U
Dibromochloromethane	140*	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.18 J	2.00 U	2.00 U
Dichlorodifluoromethane (Freon 12)	1400	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Ethyl Benzene	700	0.5 UJ	0.5 UJ	0.21 J	0.5 U	0.14 J	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Isopropyl Benzene	700	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.14 J+	2.00 U	2.00 U	0.5 U	2.00 UJ	2.00 U
Tetrachloroethene	5	0.33 J	0.5 UJ	0.22 J	0.38 J	0.86	2.00 U	2.00 U	0.39 J	2.00 UJ	2.00 U
Toluene	1000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
trans-1,2-Dichloroethene	100	0.5 U	0.11 J-	0.5 U	0.5 UJ	0.3 J	2.00 U	2.00 U	0.15 J	2.00 UJ	2.00 U
Trichloroethene	5	1.2 J	1.7 J-	1.2	1.4	2.1	2.00 U	2.00 U	0.89	2.00 UJ	2.00 U
Trichlorofluoromethane (Freon 11)	2100	0.5 U	0.5 UJ	0.5 U	0.5 U	0.31 J	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Xylenes (Total)	10000	110 UJ	0.5 UJ	1.27 J	0.5 U	1.19 J	4.00 U	4.00 U	0.5 U	4.00 U	4.00 U

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown

J = Estimated result

J- = Estimated result biased low J+ = Estimated result biased high



### Comprehensive VOC Compounds Detected 2011-2020

### Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW006	A11-MW006	A11-MW006	A11-MW006**	A11-MW006	A11-MW006	A11-MW006	A11-MW006	A11-MW006	A11-MW006	A11-MW006
	EPA Sample ID	E52L1	E52N3	E52R8	E52R9	E52T3	E3XC6	E3XD6	E3XG5	E3XH5RE	E3XP0	E3XQ1
	Sample ID	A11-MW006-110420	A11-MW006-110720	A11-MW006-120111	A11-MW006-120111-D	A11-MW006-04/02/2012	A11-MW006-120918	A11-MW006-121204	A11-MW006-130313	A11-MW006-130625RE	A11-MW006-140806	A11-MW006-141217
	Sample Date	4/20/2011	7/20/2011	1/11/2012	1/11/2012	4/2/2012	9/18/2012	12/4/2012	3/13/2013	6/25/2013	8/6/2014	12/17/2014
Analyte Name	RG											
1,1,1-Trichloroethane	200	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1-Dichloroethane	1400	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.17 J	0.11 J	0.5 U	0.12 J
1,1-Dichloroethene	7	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ
1,2-Dichloropropane	5	5 U	0.73 J	5 U	5 U	5.0 U	5 U	5 U	1.2	0.62	0.5 U	0.5 UJ
1,4-Dioxane	7.7	100 R	100 R	100 R	100 R	100 R	100 R	100 U	NA	NA	NA	NA
Benzene	5	3.3 J	2.9 J	5 U	5 U	3.1 J	5 U	5 U	4.3	0.4 J	0.58	1.2 J
Bromochloromethane		5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Bromodichloromethane	0.2*	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chloroethane		3.8 J	5 U	5 U	5 U	1.2 J	0.93 J	5 U	4.7	0.3 J	0.5 U	0.5 UJ
Chloroform	70	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
cis-1,2-Dichloroethene	70	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 UJ	0.5 U	0.5 U	0.1 J
Cyclohexane		5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	1	1.2 J
Dibromochloromethane	140*	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Dichlorodifluoromethane (Freon 12)	1400	2 J	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.088 J	0.5 U	0.5 UJ
Ethyl Benzene	700	5 U	0.21 J	5 U	5 U	5.0 U	5 U	5 U	0.21 J	0.21 J	0.36 J	0.5 UJ
Isopropyl Benzene	700	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 UJ	0.5 U	6.3	3.7 J
Methylcylohexane		5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 U	0.5 U	0.32 J	0.5 UJ
Tetrachloroethene	5	1.2 J	5 U	5 U	5 U	0.63 J	1.4 J	5 U	0.46 J	1	0.38 J	0.53 J
Toluene	1000	5 U	5 U	5 U	5 U	5.0 U	0.89 J	5 U	0.5 UJ	0.9	1 U	0.5 UJ
trans-1,2-Dichloroethene	100	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ
Trichloroethene	5	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ
Xylenes (Total)	10000	1.3 J	0.71 J	5 U	5 U	5.0 U	5 U	5 U	0.8 J	1.23 J	1.66 J	110 UJ

### Notes

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown



### Comprehensive VOC Compounds Detected 2011-2020 Source Area 11 2020 Groundwater Report

### Southeast Rockford Groundwater Contamination Superfund Site

	Station Location	A11-MW006									
	EPA Sample ID	E3XW9	E3Y05	E3Y47	E3YA9	E3YE9		A11-MW006-200303	E3YG0	A11-MW006-200909	E3YH8
	Sample ID	A11-MW006-150519	A11-MW006-160406	A11-MW006-170309	A11-MW006-181113	A11-MW006-190520	A11-MW006-191113	A11-MW006-200303	A11-MW006-200609	A11-MW006-200909	A11-MW006-201201
	Sample Date	5/19/2015	4/6/2016	3/9/2017	11/13/2018	5/20/2019	11/13/2019	3/3/2020	6/9/2020	9/9/2020	12/1/2020
Analyte Name	RG										
1,1,1-Trichloroethane	200	0.5 UJ	0.23 J	0.38 J	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
1,1-Dichloroethane	1400	0.5 UJ	0.72	1.8	0.2 J	0.75	2.00 U	2.00 U	0.11 J	2.00 U	2.00 U
1,1-Dichloroethene	7	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
1,2-Dichloropropane	5	0.5 UJ	0.5 U	0.5 U	0.5 U	3.1	2.57	2.00 U	0.5 U	2.00 U	2.00 U
1,4-Dioxane	7.7	NA	NA	NA	NA	NA	1.02	1.54	7.53	8.42	4.1
Benzene	5	0.5 UJ	0.5 U	0.5 U	2.5	8.8	3.12	2.62	2	2.28	2.82
Bromochloromethane		0.5 UJ	0.21 J	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Bromodichloromethane	0.2*	0.5 UJ	0.39 J	0.75	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Chloroethane		0.5 UJ	0.5 U	0.5 U	2.3	1.4	2.00 U	2.00 U	0.44 J	2.00 U	2.00 U
Chloroform	70	0.5 UJ	0.5 U	0.6	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
cis-1,2-Dichloroethene	70	0.5 UJ	0.47 J-	0.31 J	0.5 UJ	0.74 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Cyclohexane		0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.35 J	NA	NA
Dibromochloromethane	140*	0.5 UJ	0.45 J	0.51	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Dichlorodifluoromethane (Freon 12)	1400	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Ethyl Benzene	700	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Isopropyl Benzene	700	1.6 J-	0.5 U	0.5 U	22	37 J+	2.00 U	2.00 U	0.14 J	2.00 U	2.00 U
Methylcylohexane		0.5 UJ	0.5 U	0.5 U	0.5 U	0.71	NA	NA	0.5 U	NA	NA
Tetrachloroethene	5	0.54 J-	0.41 J	0.82	0.15 J	0.17 J	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Toluene	1000	1.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2.00 U	2.00 U	0.5 U	2.00 UJ	2.00 U
trans-1,2-Dichloroethene	100	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	2.00 U	2.00 U	0.5 U	2.00 U	2.00 U
Trichloroethene	5	0.5 UJ	0.41 J	0.28 J	0.5 U	0.5 U	2.00 U	2.00 U	0.14 J	2.00 U	2.00 U
Xylenes (Total)	10000	0.5 UJ	0.13 J	0.5 U	0.5 U	0.24 J+	4.00 U	4.00 U	0.5 U	4.00 U	4.00 U

	Station Location	A11-MW007	A11-MW007**	A11-MW007								
	EPA Sample ID	E3YB0	E3YB1	E3YF5	E3YF6			A11-MW007-200304	A11-MW007-200304-D	E3YG6	E3YG7	A11-MW007-200910
	Sample ID	A11-MW007-181114	A11-MW007-181114-D	A11-MW007-190521	A11-MW007-190521-D	A11-MW007-191113	A11-MW007-191113-D	A11-MW007-200304	A11-MW007-200304-D	A11-MW007-200610	A11-MW007-200610-D	A11-MW007-200910
	Sample Date	11/14/2018	11/14/2018	5/21/2019	5/21/2019	11/13/2019	11/13/2019	3/4/2020	3/4/2020	6/10/2020	6/10/2020	9/10/2020
Analyte Name	RG											
1,1-Dichloroethane	1400	250 U	250 U	20 J	21 J	10.0 U	10.0 U	4.00 U	4.00 U	5 U	5 U	10.0 U
1,2,4-Trimethylbenzene		NA	NA	NA	NA	31.7	32.1	22.6	21	NA	NA	53.5
1,3,5-Trimethylbenzene		NA	NA	NA	NA	10.0 U	10.0 U	4.84	4.57	NA	NA	11.1
1,4-Dioxane	7.7	NA	NA	NA	NA	0.278	0.293	3.38	3.3	0.205 U	0.205 U	0.212 U
Benzene	5	250 U	250 U	130 U	130 U	10.0 U	10.0 U	4.00 U	4.00 U	5 U	5 U	10.0 U
Ethyl Benzene	700	6500	6700	2500	2600	1420	1420	959	863	820	810	2630
Isopropyl Benzene	700	99 J	110 J	91 J	92 J	28.3	28.8	12	11	6.5	6.5	86.1
Methylcylohexane		250 U	89 J	100 J	99 J	NA	NA	NA	NA	2.7 J	2.6 J	NA
Naphthalene	140	NA	NA	NA	NA	10.0 U	10.0 U	4.00 U	4.00 U	NA	NA	11.4
n-Butylbenzene		NA	NA	NA	NA	10.0 U	10.0 U	4.00 U	4.00 U	NA	NA	11.3
n-Propylbenzene		NA	NA	NA	NA	19.5	19.6	6.68	6.03	NA	NA	82.4
sec-Butylbenzene		NA	NA	NA	NA	10.0 U	10.0 U	4.00 U	4.00 U	NA	NA	10.8
Tetrachloroethene	5	250 U	250 U	130 U	130 U	10.0 U	10.0 U	4.00 U	4.00 U	1 J	0.89 J	10.0 U
Toluene	1000	200 J	230 J	12 J	10 J	10.0 U	10.0 U	4.00 U	4.00 U	5 UJ	5 UJ	10.0 U
Xylenes (Total)	10000	13000	13000	4500	4500	4190	4210	3050	2800	2600	2600	7600

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

R = Rejected

D = Diluted sample result

U = Not detected at value shown

J = Estimated result

J- = Estimated result biased low J+ = Estimated result biased high



# Comprehensive VOC Compounds Detected 2011-2020 Source Area 11 2020 Groundwater Report Southeast Rockford Groundwater Contamination Superfund Site

			r	r
	Station Location	A11-MW007**	A11-MW007	A11-MW007**
	EPA Sample ID	A11-MW007-200910-D	A11-MW007-201201	A11-MW007-201201-D
	Sample ID	A11-MW007-200910-D	A11-MW007-201201	A11-MW007-201201-D
	Sample Date	9/10/2020	12/2/2020	12/2/2020
Analyte Name	RG			
1,1-Dichloroethane	1400	10.0 U	10.0 U	10.0 U
1,2,4-Trimethylbenzene		55.7	131	169
1,3,5-Trimethylbenzene		11.6	14.4 J	56.7 J
1,4-Dioxane	7.7	0.203 U	0.069 J	0.19 U
Benzene	5	10.0 U	10.0 UJ	44.3 J
Ethyl Benzene	700	2680	3300	3660
Isopropyl Benzene	700	89.1	109 J	486 J
Methylcylohexane		NA	NA	NA
Naphthalene	140	13.2	34.0 J	97.3 J
n-Butylbenzene		12.4	19.9 J	66.9 J
n-Propylbenzene		84.7	104 J	454 J
sec-Butylbenzene		11.3	17.5 J	68.4 J
Tetrachloroethene	5	10.0 U	10.0 U	10.0 U
Toluene	1000	10.0 U	10.0 U	10.0 U
Xylenes (Total)	10000	7920	7390	8100

S	tation Location	A11-MW130A	A11-MW130A
	EPA Sample ID	A11-MW130A-200909	E3YH7
	Sample ID	A11-MW130A-200909	A11-MW130A-201201
	Sample Date	9/9/2020	12/1/2020
Analyte Name	RG		
1,1,1-Trichloroethane	200	3.51 J	3.51
1,1-Dichloroethane	1400	4.11	3.77
1,4-Dioxane	7.7	6.1	4
Total Xylenes	10000	4.00 U	4.00 U

### Notes

All results in micrograms per liter

Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410

Shaded results exceed remediation goal

\*\* = Duplicate sample

D = Diluted sample result

U = Not detected at value shown



### Appendix A

# Source Area 11 Conceptual Site Model Southeast Rockford Groundwater Contamination Superfund Site

### Physical Setting with Respect to Contaminant Migration

Source Area 11 (Area 11) is located on the northeast corner of 11<sup>th</sup> Street and Harrison Avenue in Rockford, IL. Area 11 is one of four known and identified source areas that are largely responsible for the Southeast Rockford Groundwater Contamination (SERGC) site as shown in **Figure 1**, which was modified from the 1995 Final Remedial Investigation Report (CDM Smith Inc. [CDM Smith] 1995).

Source Area 4 (Area 4) is 0.25 mile hydrogeologically upgradient to the east-southeast of Area 11. Area 4 had chlorinated volatile organic compound (VOC) contamination (primarily 1,1,1-trichloroethane [TCA]) contamination prior to completion of its remedial action. Source Area 7 (Area 7) is further upgradient to the east-southeast about 1.75 miles from Area 11. Area 7 has a wide range of contamination that primarily consists of chlorinated VOCs. The south end of Source Area 9/10 (Area 9/10) is immediately west of Area 11 on the opposite side of 11th Street with the north end of Area 9/10 located 0.1 mile north. Contamination associated with Area 9/10 is chlorinated VOCs located in the northern half of the Area 9/10 that does not impact Area 11. Conversely, contamination from Area 11 cuts across the southern portion of Area 9/10. Groundwater samples collected 0.25 mile south (i.e., side-gradient) and immediately upgradient document background contamination in groundwater that is not attributable to Area 11.

Area 11 was previously developed with buildings, structures, and asphalt. The City of Rockford purchased the southern portion Area 11 for use as a lay-down area for a nearby road construction project and removed all asphalt surfaces, above ground structures, and some shallow subsurface structures in 2016. Following completion of the road construction project, the southern portion of Area 11 was graded, seeded, and turned into greenspace.

The geologic stratigraphy at Area 11 is fine- to medium-grained sand down to about 30 feet below ground surface (bgs), followed by medium- to coarse-grained sand with gravel down to about 75 feet bgs. Below this is a silt and clay layer believed to be around 10 to 15 feet thick, based on the presence of what appears to be the same unit observed at a similar elevation (656 feet above mean sea level [msl]) in MW114B, located 0.25 mile south of Area 11; however, the silt and clay unit is not present down to 640 feet msl in MW126B, located 0.4 mile west-southwest of Area 11. A cross-section of Area 11 is shown in **Figure 2**.

Groundwater in the unconsolidated material at Area 11 enters the eastern edge of the site flowing in a northwesterly direction before eventually turning west, and then west-southwest as it exits the site's western boundary. Further downgradient, groundwater flow is directly to the



southwest and the Rock River. This gradual shift in groundwater flow from the northwest to the southwest in the vicinity of Area 11 is responsible for the "banana" shape of the historic SERGC groundwater contaminant plume seen in **Figure 1**. The nearest surface water body is Buckbee Creek located about 0.25 mile directly south. The length of Buckbee Creek near Area 11 is a concrete-lined surface water drainage ditch in poor condition that only contains water after precipitation events.

### **Sources**

One of the companies that previously operated at Area 11 was Rockford Varnish which manufactured varnish and related products for the furniture industry from 1906 to 1983 (U.S. Environmental Protection Agency [U.S. EPA] 2002). The overall primary contaminant source at Area 11 is eight former aboveground storage tanks (AST) and ancillary systems (i.e., piping) that were located east of the former Rockford Varnish facility. **Figure 3** shows the approximate locations of the former ASTs and buildings with superimposed locations of the existing onsite monitoring wells. The ASTs were removed sometime between July 2003 and April 2005 based on Google Earth Pro historical imagery. The OU2 RI report mentions other potential sources including a "bunker" used by Rockford Varnish that seeped a tar-like substance and a dumpster used by Rockwell Graphics that leaked cutting oils (U.S. EPA 2002).

The former ASTs contained various solvent products used by Rockford Varnish, but the specific chemicals stored in individual tanks is not known. Based on the VOCs found at Area 11, it is assumed they contained solvents including toluene, ethylbenzene, xylenes, and methylcyclohexane. Area 11 was determined to be a significant source of non-chlorinated VOCs in SERGC groundwater, with the highest and most extensive concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds found in groundwater (U.S. EPA 2002).

At this point it is important to consider what exactly constitutes "a source" at Area 11. The ASTs can be collectively considered a source, but multiple leaks from different pipes releasing different substances would result in multiple individual sources in proximity that eventually become comingled.

The highest concentration of any VOC ever detected in groundwater at Area 11 was toluene at 520,000 micrograms per liter ( $\mu$ g/L) in direct-push groundwater sample A11-GW-5, collected on January 15, 2008, from 38 to 42 feet bgs at a location a couple feet west of MW004A (screened interval of 30 to 40 feet bgs) during the first round of predesign field activities (CDM Smith 2009). Reference values for the solubility limit of toluene vary and the solubility limit itself varies with temperature, but in general 520,000  $\mu$ g/L is at or very close to the solubility limit of toluene and strongly indicates non-aqueous phase liquid (NAPL) source material. In addition, during the same investigation a membrane interface probe (MIP-6) advanced in the same general location had the shallowest maximum detector response and among the highest detector responses overall indicating that this location is most likely closest to the source. Finally, although the contamination encountered at MIP-6 is the shallowest onsite, this zone of high concentration contamination does not exist as an LNAPL at the water table, but in a narrow, 8- to 10-foot-wide band that starts sharply several feet below the water table and increases in depth with distance from MIP-6. The 2009 pre-design technical memorandum contains a detailed description of groundwater contamination at Area 11 (CDM Smith 2009).



The Source Control Operable Unit (SCOU, also referred to as OU3) Remedial Investigation (RI) Report states that chlorinated solvents were used by Rockford Varnish and that they were stored in the ASTs, but the SCOU also states that levels of chlorinated VOCs in this area are likely from lateral migration of soil gas and volatilization from groundwater, and that the ASTs were not suspected of being the source of tetrachloroethene (PCE) that was found in the subsurface (CDM Smith 2000). Historically, detections of chlorinated solvents in Area 11 groundwater have been sporadic and at concentrations three orders of magnitude below concentrations of ethylbenzene, toluene, and xylenes (ETX). However, sample dilutions required to quantify the high concentrations of ETX compounds increase detection limits for other compounds to the point that chlorinated VOCs may be present at concentrations greater than applicable groundwater standards. Despite that, Area 11 groundwater samples are occasionally analyzed without dilution and concomitant elevated detection limits and the concentrations of chlorinated VOCs in those sample results are not elevated compared to background samples.

Conversely, no indication of source material has ever been found in subsurface soil samples collected from the vadose zone (CDM Smith 1995, 2000, 2009, and 2013). Because most of the material released to the environment may have been released as chemical product, it is possible that the product has evaporated or degraded to the point that only trace amounts remain in the vadose zone. In any case, any remaining vadose zone source material probably lies directly below the former AST concrete foundations that are still in place. Based on CDM Smith's experience at Area 4, which has the same geology as Area 11, contamination migrates almost vertically straight down with little lateral migration. Assuming the contaminant releases at Area 11 were discreet, point source releases (e.g., from a leaking pipe) and not wide-area releases, the footprint of potential source material at the water table could be no more than a couple feet in diameter.

### **Migration Pathways and Fate**

As of 2022, almost 40 years have passed since Rockford Varnish ceased operation following 77 years of operation. Contaminants, assumed to be product, released to the environment migrated downward under the force of gravity as NAPL or in solution with infiltrated precipitation, although ground surface barriers to precipitation probably limited this process. Once in the subsurface, the contaminants sorbed to soil, volatilized into the vadose zone, and continued downward as NAPL until groundwater was encountered. From there, multiple mechanisms drove contaminant migration within Area 11 and offsite including the contaminant's chemistry, geology, hydrogeology, and ground surface conditions.

In the vapor phase, VOCs can migrate in the unsaturated zone through both advective air currents and vapor phase diffusion. Diffusion in the vapor phase is up to four orders of magnitude faster than diffusion in the aqueous phase and is therefore a material process for migration. Vapor that has migrated from the source areas can then sorb to soils at some distance away from original release locations, leading to detectable contamination in soil as was observed with chlorinated VOCs during the SCOU RI (CDM Smith 2000). The goal of installing an SVE system is to capture these vapors from the soil.

Migration of dissolved phase contaminants in groundwater is driven naturally by advection. Contaminant migration through the sand and gravel is heterogeneous because of the varied distribution of the zones creates localized and varying intervals of moderate to higher



permeability (fine- to medium-grained sand and sand and gravel). Contaminant migration is preferentially through the more permeable zones. In the aggregate, sufficient permeability is present in the aquifer for contamination to migrate out of Area 11 immediately downgradient as observed in MW007 at the GMZ boundary. However, contaminant concentrations in MW007 are much lower than in MW002 despite the two wells being only 113 feet from each other, and further downgradient ETX contaminants known to be associated with Area 11 decrease to low single-digit concentrations in MW005 and MW006. This rapid decrease in concentrations with distance from Area 11 has been observed since the wells were first sampled, but the exact nature of the processes responsible for the attenuation have not been documented.

Lastly, ground surface conditions at Area 11 changed in 2016 when asphalt and other materials were removed from the area resulting in new greenspace. The asphalt and other materials served as barriers to limit rainwater infiltration and VOC diffusion from the subsurface into the atmosphere. Once these barriers were removed, these processes could resume a natural cycle increasing the environment's attenuation capacity. Additionally, as the area becomes more aerobic, this can feed microorganisms that may potentially be present that can favor and contribute to plume reduction. Additional study is required to determine the nature of these attenuation processes.

### **Receptors**

The following bullets summarize the receptors for the site:

- Ecological Receptors
  - The potential exists for ecological receptors in/around the shrubbery/trees located within Area 11 boundary, though no conclusive determination has been made thus far to evaluate the site-related risk to receptors.
- Human Receptors
  - No data collected thus far has indicated that surficial contamination is still present.
     However, given the inability to sample directly below the former ASTs, the presence of surficial contamination cannot be ruled out.
  - There is one building (Accurate Metals Illinois) onsite where vapors could diffuse from the subsurface to accumulate and impact human health.
  - Human health impacts from groundwater use are not anticipated at or downgradient of Area 11 because there are no users of private groundwater wells.

### References

CDM Smith. 1995. "Southeast Rockford, Final RI Report" January.

CDM Smith. 2000. "Final "Final Remedial Investigation Report for the Southeast Rockford Source Control Operable Unit. July 25.

CDM Smith, 2009. Area 11 Pre-Design Technical Memorandum Southeast Rockford Groundwater Contamination Superfund Site. January 22.

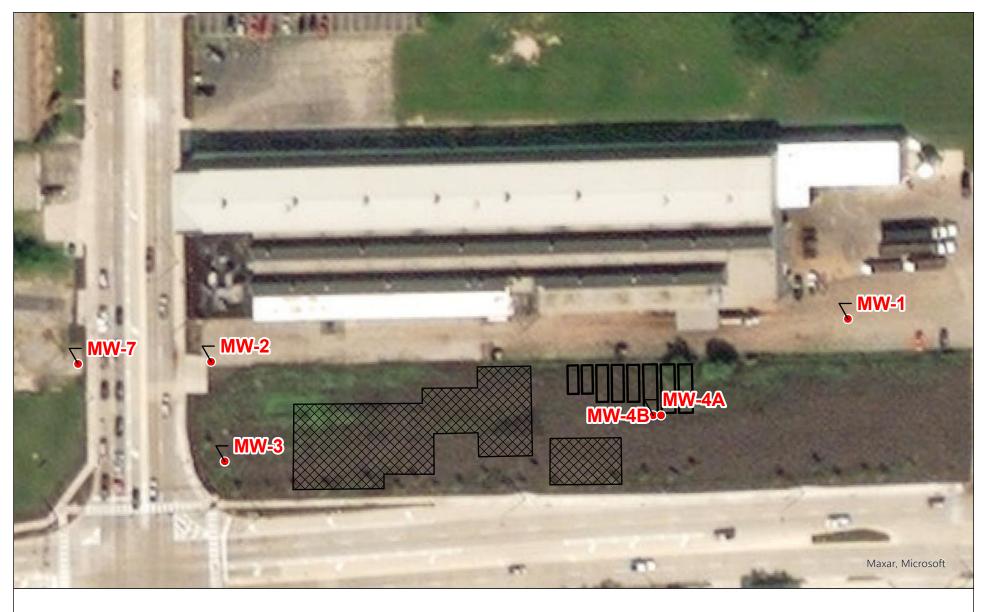


CDM Smith. 2013. Area 11 Phase II Pre-Design Technical Memorandum, Southeast Rockford Groundwater Contamination Superfund Site. September 2013.

United States Environmental Protection Agency (U. S. EPA), 2002. Record of Decision, Southwest Rockford Ground Water Contamination Site, Operable Unit 3. EPA/ROD/R05-02/077.



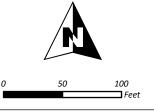






Former Building

Service Layer Credits:





<sup>-</sup> Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. - Road Centerline Source: Census TIGER/Line Roads, 2020.

## Appendix B

**Groundwater Sampling Sheets** 



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Fez 0.11 Hach DR 900

Pump Type: Submersiph Meganenzeon XI Depth to Water (from master list): 21.57SOUTHEAST ROCKFORD AREA 11 LOW FLOW GROUNDWATER SAMPLING Well #: MW - 130A Weather: 5124, Cloudy Date: 3/23/21 Arrival Time: O 800

Samplers (full name): John Gody + Cathering Cox

TIME	DEPTH	EI OW BATE	EI OW PATE	-5	SPECIFIC	TURBIDITY	DISSOLVED	TEMP	REDOX POTENTIAL
(hh:mm)	TO WATER (FT TOC)	(ml/min)	(+/- 0.3 FT)	(+/- 0.25 SU)	(+/- 50 mS/cm)	NTUs (+/- 10%)	mg/L (+/- 10%)	(+/- 5 C°)	mV (+/- 10 mv)
3825	DB25 22.03	202		25.0)	62.1	521	8,27	11.83	0,75
08 30	21.95	255		96.9	1.29	401	6.49	11.80	53.0
0835	2195	22		7.01	1.29	81.9	2,46	11.86	28
	7194	JLH		7,03	1.30	66.3	5.14	= =	٥
SK K	22.00	500		7.03	(.30	53.3	4.67	1.94	79
Q580	10.77	天		7.06	1.30	39.9	4.76	20,2	67
0855	2002	47		7.09	1.30	30.7	3.93	07.2	99
060	ho.22	12		7,0%	(.3)	24.0	3.72	15.00	63
0908	22.03	esh		11.2	1.29	19.0	3.70	(20(	79
0/60	20.22	424		7.11	1.29	(6.)	3.71	(8)	19

Departure Time QC Sample Type N 0 N & Sample Time

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU. Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

03 23 2	Well #:	Well #: 00 \	master list):	Laimb I	ruinp 1940. Susimens ble mysa mon 360 mm	18 18 18 18 18 18 18 18 18 18 18 18 18 1	1 /MW 200
		o water (monn)	master msty.	_	(		
>	SOS CLOUDE, WANT VAIN SAMPLE	Samplers (iuii maille).	, XS.	J. 570 .	^		
FLOW RATE (ml/min)	DRAWDOWN (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
<b>—</b>		7.43	12.	374	19.69	3,19	125
<del></del>		7.7	1.27	236	11.29	13,17	721
		7.39	(.26	] 0]	11.63	13.06	[23
		7.39	92-1	68.5	11.70	13.08	72)
		7.37	1.25	35.4	[[.20	13,09	123
		7.36	.27	28.2	11.03	(3.60	125
		7.35	- K	<b>6</b> .3	11.29	13.03	126
		7.36	1.25	9.7	(0,93	12.95	92)
		7.35	1,25	5.0	(8.0)	[2.95]	17
				· hv h			
	our clames of	Type			Departure Time	1521	7

Hadr DR900

Fe2 2, ( ) July = 10.04

Pump Type: (Whomenes) le Mons a Avonsoon XL **POTENTIAL** (+/- 10 mv) 150 19 REDOX 9 1.53 る。か [3.22 という (+/- 2 C°) TEMP DISSOLVED ナるよ 2 なって 2.00 mg/L (+/- 10%) OXYGEN け、 1. Grabos TURBIDITY 26.0 (+/-10%)47.9 23.3 20. 74. 90. Depth to Water (from master list): 26.5بر ج ک 1.39 SPECIFIC COND. (+/- 50 mS/cm) 3 5 05. w テ Samplers (full name): (+/- 0.25 SU) 25. J ر ان ان Well #: (+/- 0.3 FT) FLOW RATE DRAWDOWN 45500 (ml/min) 500 P P 200 2 S 12/1/ Calin TO WATER 26.60 26.60 29.97 25.29 76.6 26.59 70,00 (FT TOC) DEPTH Arrival Time: , S 14% 2 Z (hh:mm) Weather: ら ナ Date:

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

Departure Time

QC Sample Type

Sample Time

parentheses. Turbidity +/- 10% or less than 5 NTU.

<b>IDWATER SAMPLING</b>
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Arrival Time:	1e: ( , , , o, o, o, o		Depth	Depth to Water (from master list):	master list):	. 92	08.97		>
Weather: 0	overcast Do		Sample	Samplers (full name):	( . (6 ×	J. Grabs	25		
TIME (hh:mm)	DEPTH TO WATER (FT TOC)	FLOW RATE (ml/min)	FLOW RATE DRAWDOWN (ml/min) (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
7   60	26.88	290	,	12:16:30		7.5	1.36	12:17	9/1-
2260	26.88	500		ትት-9		0.0	70:	12.09	-127
1250	38.72	205		0.50	1.25	0.0	0.90	12.[[	-[3]
09.32	18.72	205		6.54	1.29	6.0	97.0	12.[[	-134
6437	28.9%	SPO		6.26	1.29	0.0	69.0	<u>ئے ۔ ال</u> م	-135
2460	38.96			6.50	1.29	0.0	99.0	12-19	-13
i i	THU	1		AON O M S M S M	0 5 1	\$2	Donorfire Time	0001	

SOUTHEAST ROCKFORD AREA 11 LOW FLOW GROUNDWATER SAMPLING	2 ( Well #: 4 K Pump Type: Swhmins; 10 10 Ming Monson IV	Depth to Water (from master list):	よりら Samplers (full name): (・(ヘス) )・ (ティカン)	FLOW RATE   DRAWDOWN   ph   COND.   (+/- 0.25 SU)   (+/- 50.25 SU)   (+/- 10%)   (+/- 10%)   (+/- 10%)   (+/- 10%)   (+/- 10 ms/cm)   (+/- 1	8 500 13.16 -210	1 hL.9 ass	6.55 [.27 [.27 0.36 13,19	36.0 dr.1 dr.1 l.2d cas				
<u>REA 11</u> LOW FLOW			503	FLOW RATE DRAW (ml/min) (+/- C	500		290	CAS				
ROCKFORD A	03/24/2	3/5	overcast,50s	DEPTH TO WATER (FT TOC)	28.38	28.36	28.36 500	1545 28.36				
SOUTHEAST F	Date:	Arrival Time:	Weather:	TIME (hh:mm)	1530	1535	1549	1545				

Fez 0. 18 Hach DRAOD

Date: 0	03/23/21	_	Well #:	7		Pump T	rype: Subm	ersible M	Pump Type: Submersible Megallognisanx	2 TXVB
Arrival Time:	603		Depth (	Depth to Water (from master list):	master list):	612	5		7	
Weather:	58 lashit	ight to moderate ain Samplers (full	Z Ja in Sample	ers (full name):	(.00x	J. Grabs	5			
TIME (hh:mm)	DEPTH TO WATER (FT TOC)	FLOW RATE (ml/min)	DRAWDOWN (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)	
5191	27.90	500		7,42	<u>:</u>	589	2.94	か)・2)	8	
1620	7799	500		44.7	9/.(	219	14(	1217	37	
729	27.99	295		7.41	1.2(	85-3	2.07	12.6	47	
1630	27.98	450		7.41	42.)	65.0	2.00	12.07	46	
1635	27.99	22		7.39	67.)	31.5	2.24	12.07	520	
55	27.99	429		キル	1.31	35.1	2.15	12-25	42	
79	27.99	A'SO		15'2	1,32	4,25	2.00	12.23	34	
0591	27.99	420		7.47	1.33	12.5	2.08	12.17	£3	
1655	27.99	419		7.46	1.34	१५. ड	2.00	12.6	48	:
1700	27:90	429		ን. ሃ	1.34		6.07	12.37	53	the fame
1705	27.90	dsh		7.42	1.33	(3.6	5.72	12.42	2	2000
										される
Sample Time	502		QC Sample Type	e Type N & NQ	M		Departure Time (733	e [733		to equilinate

Pump Type: Submoxible Mega Mans ron XL 子.72 رولا Depth to Water (from master list): Samplers (full name): Well #: Weather: 505, Cloudy, light rain 03 23/2( Arrival Time: Date:

REDOX POTENTIAL mV (+/- 10 mv)	93	44	96	9	70	50	901	100	[07	08		
TEMP °C (+/- 5 C°)	13.28	13.5%	13.5%	13.65	13.62	13.60	13.63	13.69	13,70	13.71	13.68	
DISSOLVED OXYGEN mg/L (+/- 10%)	18.45	9.80	8.54	1.7.1	7.63	4,2	7.25	7.21	7.44	1.4	7.39	
TURBIDITY NTUs (+/- 10%)	242	146	40.2	88.1	72.6	ナニブ	32.0	21.4	5.0	t e	es j	
SPECIFIC COND. (+/- 50 mS/cm)	1.32	1.3%	1.39	1.39	1.39	오.	゙゙゙゙゙゙	1,41	) }.	1.42	745	
ph (+/- 0.25 SU)	1.23	7.27	7.28	7.27	7.27	7.25	7.26	7.27	7.28	7.30	7.30	
FLOW RATE DRAWDOWN (#/- 0.3 FT)												
FLOW RATE (ml/min)	224	005	500	485	کوه	200	Son	০০১	992	aas	560	
DEPTH TO WATER (FT TOC)	27.39	27.39	27.35	27.39	27.59	27.39	27.39	27.39	27.39	77.39	27,39	
TIME (hh:mm)	12/2	215/27	1221	1227	1232	1237	12 42	1247	22	1257	(302	

Departure Time QC Sample Type Sample Time

SOUTHEAST ROCKFORD AREA 11 LOV	W FLOW GROUNDWATER SAMPLING	
EAST ROCKFORD AF	_	
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ш	AST	
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SOUTHEAST	ROCKFORD <u>A</u>	SOUTHEAST ROCKFORD <u>AREA 11</u> LOW FLOW GROUNDWATER SAMPLING	-LOW GROUN	DWATER SAM	PLING		Fe2	Fe2 4. (1)	(diluted) tach	Hach
Date:	03/23/21	4	Well #:	900		- dmnd	rype: Sulom	ersible N	Pump Type: Sulpmersible Max Monston XC	ر ا ا
Arrival Time:	1020		Depth	Depth to Water (from master list):	master list):	84,75			,	
Weather: 5	taloidy, light	light rain	Samplers	ers (full name):	(* (aX	1. Grabs	<b>\$</b> 0			
TIME (hh:mm)	DEPTH TO WATER (FT TOC)	FLOW RATE (ml/min)	DRAWDOWN (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)	
子01	27.47	000		7.(0	74.1	9.61	7.58	[3, 13	-97	
124	NYC 27.47	SZ h		7,13	1.47	22.0	4.17	13.32	-/03	
200	27.47	000		7415	33.1	23.1	2.23	13.48	-1/3	
00	77.47	475		7.18	8h.	9.22	1.45	13.66	<u>0</u> 0	
00	17.75	475		7.19	82.1	23.5	.  -  -	13.72	-122	
		•								
Sample Time	00)		QC Sample	QC Sample Type √ 0 ∩ C	2		Departure Time	(20) au		
	_ , _									

Date:

3.19 Diluthon2a = 6.36 Fez Hach DR900 Pump Type: Sub-Weisible Mega Minger XL Depth to Water (from master list): SOUTHEAST ROCKFORD AREA 11 LOW FLOW GROUNDWATER SAMPLING Samplers (full name): 700 Well #: Weather: Ove vcast 505 03/24/2 Arrival Time: 100

TIME (hh:mm)	DEPTH TO WATER (FT TOC)		FLOW RATE DRAWDOWN (ml/min) (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
1057	26.38	کوی		6-23	537	102	21.7	B 13.[4	-80
701	26.38	905		6.09	١٠٦٧	Ý.0	71.21	B 13.62	-89
[[0]	26.38	005		70.9	77-1	23.2	13.43	13.75	95
2 = 2	26-38	47/	w"	6.13	1.43	13,5	17.38	13.72 -106	-106
1	26.38	514		6-23	۱۰ ۴۷	3.8	1.24	13.73 - 1/6	- 1/6
121122	122 26.38	500		6.29	1.43	4-0	10.21	13-80	121-
•								-	
Sample Time	1 22		QC Sample	OC Sample Type DUD ( CAM SOMA () 10	S Jan	A () A	Departure Time	9	\

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU.



REDOX POTENTIAL (+/- 10 mv) 71 19,66 5.36 (+/- 2 Co) 4.82 C C C 13,48 Submersille 14.07 00 S 65 DISSOLVED mg/L (+/- 10%) OXYGEN 9/5 5.29 8 50.23 050 12.2 67 LL) Pump Type: TURBIDITY 080 (+/-10%)55.2 NTUS ソイロ 78.8 282 Sarbarino 210 2 56. Depth to Water (from master list): SPECIFIC COND. (+/- 50 mS/cm) 0 5 Samplers (full name): ∭ ₩ -9 091 ٥ 0 58 (+/- 0.25 SU) 5.09 4.80 MOLF 5,36 5.40 5.39 7 LR. 25.5 Well #: (+/-0.3 FT)FLOW RATE DRAWDOWN 0 (ml/min) 0 TO WATER (FT TOC) DEPTH 202 22,8 ンナと Arrival Time: 7:25 25 805 20 744 208 745 Date: 0 (hh:mm) Weather: TIME のなり S

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU.

Departure Time

QC Sample Type

50%0

Sample Time

Fez COZ

**POTENTIAL** (+/- 10 mv) REDOX して 500 S 0 58 60 (+/- 2 C°) 15.60 17.68 6.00 E 543 15.94 TEMP 17.63 00 is 6.00 Departure Time DISSOLVED 2.62 13.10 mg/L (+/- 10%) 6.2° OXYGEN 13.43 6.83 6.23 80.9 5.95 7.83 DOLLE & TED Pump Type: TURBIDITY 76 4C) 22.3 (+/-10%)256 NTUs ا و. 25.0 و د د Salas 763 5 20 Depth to Water (from master list): SPECIFIC 502 (+/- 50 mS/cm) 150 1.53 Samplers (full name): Wat COND. アレニ is. 1.52 いから (.S) SAMPCES ंगुर NW-00 (+/- 0.3 FT) (+/- 0.25 SU) 05.5 とらし 2.62 517 5.75 2.58 2.69 ならら 000 CA QC Sample Type Well #: FLOW RATE DRAWDOWN 90,0 2028 (ml/min) 200 DEPTH TO WATER (FT TOC) 1:10 29.49 Arrival Time: 13: 58 Sample Time Date: 6/8 14:30 4:08 区市 4:35 4:00 2:5 Weather: | (hh:mm) 55:51 14:10 TIME 4:00 51:17

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU.

Fez D. W not record, ant cloa

DEPTH FLOW RATE (ml/min)  (FT TOC)  27.29 250  570PED FLOU	Samplers (full name)  DOWN  3 FT)  (+/- 0.25 SU)  COO 5 8 8  E 8 1	SPECIFIC COND. (+/- 50 mS/cm) (-71/3)	TURBIDITY NTUS (+1-10%) 389 MLI MT S 45.5	DISSOLVED OXYGEN mg/L (+/- 10%)   (+/- 10%	TEMP °C (+1-5 C°) 21.05 22.05 22.63	REDOX POTENTIAL mV (+/- 10 mv) - 24
DEPTH FLOW RATE (ml/min)  (FT TOC)  27.29, 250  STORPED FLOU	ph (+/- 0.25 SU)  5 8   5 8   5 8	SPECIFIC COND. (+/- 50 mS/cm) 0.71/3 0.71/3	TURBIDITY NTUS (+/- 10%) 3 % 9 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	DISSOLVED OXYGEN mg/L (+/- 10%)   4 7 5   7 7 5   7 124	TEMP °C (+/- 5 C°) 2/.05 22.05 22.63	REDOX POTENTIAL mV (+/- 10 mv)  -   9
STORED FLOW, Trouble Shocking	02 5.81 5.81 CLOGGED	0.713 0.703 ~/ A	389 NTS 95.5	17.8	20.63	52-
STORPED FLOW, I rough Study of the study of	5.81 CLOGGED	0.703 1.705	221 NTS 95.5	17.8	20.63	52-
STORPED FLOW, Inchie	CLOGGED	705	NTS 95.5	1.29	08:17	
250 2 250 Line	17.	,705	95.5	1,29	08:17	
2 Sweeting	2 6					9
2 Swepting						
	and Jacob	That I	Samo	- t	3	7
		New Y	Morrison	5/05	9	
	73	How		to the	Conc	5/5/
	7.0				1	
۵۲, C)		0//		F	17: 20	0

Well #:

Pump Type:

7.736 mg/

Depth to Water (from master list): Samplers (full name):  $\mathcal{N}_{oldsymbol{A}}$ 

> Arrival Time: Weather:

Date:

(hh:mm)	DEPTH TO WATER (FT TOC)	FLOW RATE DRAWDOWN (#/- 0.3 FT)	DRAWDOWN (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	POTENTIAL mV (+/- 10 mv)
0110	27.25 100	Clos	0.1	6.09	1.60	31.8	3,34	16.27	- (31
0715				5,93	091	40.4	9.36	15.91	-136
67.70				585	19'1	24.8	0	16.29	-140
0772				18.3	1.62	16.3	0	18.91	-143
6730				5.77	1.67	0.01	0	18:91	771-
D735				5.74	791)	8:9	9	52.61	- 142
2710				SAI	SAMPLES	000	JEC T		
×a i									
Sample Time	h L ()	S	QC Sample Type	Type			Departure Time	Ofos	

Fe2 0.205 mg/

Pump Type: The Darlie Depth to Water (from master list):  $\mathbb{Z}$   $\mathbb{S}$  ,  $\mathbb{C}$   $\mathbb{C}$ Samplers (full name): ///att Well#: MW 4A Arrival Time: 13:43 Date: (6/9/2021 Weather: Partin

TIME (hh:mm)	DEPTH TO WATER (FT TOC)		FLOW RATE DRAWDOWN (#/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
13 SS	1355 28.66	000	0	6.45	938 Q	d). (ح)	7.70	23.68	-132
1400				6.45	988.0	13.2	3.14	22.59	147
1405				-Sh.0)	0,903	24.6	(.80	21,93	-158
01/2)				6.49	0.910	29.2	1.56	23,09	-167
[415				6.50	0,923 29.5	29.5	(S)	21.19	89)-
1420				05.0	0.931	28.5	04.1	22,13	112
1425				15.9	0.933	27.0	1,4(	21.38	173
1430			SAMY	AMPCES	COLLEG	(131)			
						١			
						G			
					< -				

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in

QC Sample Type

Sample Time (4 30

Departure Time | C : 55

parentheses. Turbidity +/- 10% or less than 5 NTU.

Pump Type: Depth to Water (from master list): Samplers (full name):  $\bigcup_{n \in \mathbb{R}}$ Well #: 7088 Date: № 6/8/2 Arrival Time: Weather:

O W	DEPTH TO WATER (FT TOC)		FLOW RATE DRAWDOWN (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
N	28.25	00/7	10.01	94.9	0579	0	15.9	11.42	-104
				94.9	0.966	0	3.9]	20.17	-55
				Lhig	10	603	3.45	20.38	62-
1				84.3 W	50.	139	3.13	89.0Z	8-
				6,45	1.05	1951	18.2	10.22	H
				95.3	1.09	89	2,75	20.72	0
į .				949		04)	hL'2	E9.12.0	9
1				14.9	H-1-	121	21.73	21.43	19
1				6,45	51.	1531	278	80.48	22
				544	1,15	711 HELA	56.2	19,43	233
1			V	449	91.1	Zi E	2.75	20.48	35
1				44,9	Ti-	1:56	787	20.02	38
				6,44	[.[7	87.5	28.2	20.38	24
_			QC Sample Type	Type			Departure Time	je je	
					1	5 66	2.52	15:20	45
)								,	

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

parentheses. Turbidity +/- 10% or less than 5 NTU.

POTENTIAL (+/- 10 mv) REDOX T 2 200 200 (6 5 ိုင (+/- 5 င°) 20.48 19.83 TEMP 20.80 0 Pump Type: Cohweth 5 0 00 Departure Time DISSOLVED mg/L (+/- 10%) OXYGEN 80 5.39 GS. 82 9 1 いるい J Schools OCCEC TURBIDITY (+/-10%)NTUs N 0 00 0 59 5 V Depth to Water (from master list): SPECIFIC COND. MSI (+/- 50 mS/cm) 4 4 SA しといい 4 000 SAMPLES 16 Well #:///1.000 Samplers (full name): (+/- 0.3 FT) (+/- 0.25 SU) 626 5.99 6.23 01.9 6.22 6.19 6.27 QC Sample Type FLOW RATE DRAWDOWN 60.Q1 2008 (ml/min) 300 DEPTH TO WATER (FT TOC) 27,67 Arrival Time: タマリ Date: (0/8/30) Sample Time 01.0 000 (hh:mm) 050 50 TIME 25 0 025 1045 1055 Weather: 020 5/0 0

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU. Fe2 1.502

Date: $(O/8)$	7		Well #:	Well #: $\mathcal{M} \mathcal{W} - \mathcal{O}$		Pump	Pump Type: Submersald	rsado	
Arrival Time:	9:09		Depth	Depth to Water (from master list):	master list):	MODE.	27.73		
Weather: mostly	Aly don	7°08 Y	Sample	Samplers (full name):	Chois	Albredit	(ales K	In M	It Carban
TIME (hh:mm)	DEPTH TO WATER (FT TOC)	FLOW RATE (ml/min)	FLOW RATE DRAWDOWN (#/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
9:30	27.74	900	0.0	5.62	1.78	19.9	1.59	20,46	-127
9:35	Ī		-	5.59	1.80	2.19	25.0	18.35	121
9:40				5.57	1.79	23.52	0,35	18:49	-133
4:45				5.57	1.79	8.82	97:0	18.73	-134
9:50				5.57	1.78	24.7	6.13	18.12	134
4:55				5.58	1.77	25.6	0.05	18.72	981-
00:01				5.49	1.77	15.7	0	17.85	1/2/
16:05				5.31	1,74	25.9	0	17.29	-12/
		-							
									10
	Sp. 61			///	A		j		
Sample Time	- 1		QC Sample Type	Type / /	,		Departure Time	le	

0.839

1-00-1 Well #: ///

Pump Type:

26.6 Depth to Water (from master list): Samplers (full name): 0 Arrival Fime: 0845

Weather:

Date: ("/9")

TIME (hh:mm)	DEPTH TO WATER (FT TOC)		FLOW RATE DRAWDOWN (ml/min) (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
0900	0900 26.78	250	0.11	5.40	1,46	9.1	2.66	23.26	160
0405	_		٧	5.17	(.50	59	2.07	20.92	26-
0169				5.17	[5]	2'L	1.96	.00.76	-95
5160				5.12	1.47	2.9	1.42	19.61	hb-
04 70				1.2	154	1,1	0	19.29	-48
1925				I is	451	6.9	0	19.64	00/-
0930				F.64	1.53	7.0	0	19.75	201-
55000	\frac{1}{2}								
					• (				

0925 Sample Time

1 inc: 0950

Departure Time

QC Sample Type

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.



Southeast Rockford, Area 11

Poz- 4.02 mg/L

SITE NAME:

POTENTIAL (+/- 10 mv) REDOX 00 est 700 76 TO 2 4 7 Q 9 14.33 14,26 14,36 9/1:41 14,34 14.42 19.17 (+/- 2 Co) 14,21 LEMP n 17:05 14:51 7 200 DISSOLVED 3.92 3.82 3.80 mg/L (+/- 10%) 3.80 OXYGEN 68 3,86 40.7 81.1 mi MIST TURBIDITY : dabs (+/-10%)202 250 8 300 000 9 1001 90 -0 (+/- 50 mS/cm) DEPTH OF PUMP: SPECIFIC COND. 2007 77 20 200 200 1.27 1.28 SAMPLERS: 1.78 200 1.29 WELL #: 6.77 ph (+/- 0.25 600 6,87 Kr. 5 6.55 6.93 6.09 6.90 6.71 6.90 Su) DRAWDOWN (+/- 0.3 FT) FEET COP FLOW RATE 300 23 TO WATER SP SPS WEATHER CONDITIONS: CALL DEPTH (FT TIC) VOLUME PURGED (GALS) ELAPSED TIME (MIN) 545 3 535 550 555 5 40 000 (625 605 615 DATE: 0/9 TIME

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

parentheses. Turbidity +/- 10% or less than 5 NTU.

Est: 2.14 ma/2

### LOW FLOW GROUNDWATER SAMPLING

WL: 24.69

Southeast Rockford, Area 11

SITE NAME:

WELL #:

Overcas WEATHER CONDITIONS: 570F

DATE:

TIME:

SAMPLERS: \(\int\) \(\int\). \(\int\)'a DEPTH OF PUMP:

	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	POTENTIAL mV (+/- 10 mv)
12:20		34.73	250	40.0-	80.0	1,39	34.3	62.0	15.15	-99
13:35					6.69	1.39	34.6	0.57	15.31	101-
13.30					6.69	1.38	37.7	66.0	15.16	-107
13:35					11.0	1.38	33.5	0.43	15:40	601-
13:40					6.70	1.37	18.9	07.0	15.47	111) -
19.45					11.9	1.37	60	1.6.0	15.54	-113
13:50					6.70	1.39	13.7	0.39	15.60	411-
13:55					01.0	1.38	13.7	0.36	15.59	711-
13:00					11.9	1.37	13.3	66.0	15.73	911-
13:05	SAn	MPCE	) )	100	7	(3)				
11										

For the 3th 2, 52 m S/L LOW FLOW GROUNDWATER SAMPLING

WL=24.29

DATE: 9/

WEATHER CONDITIONS: 50° F

WELL#: MW - 3

DEPTH OF PUMP:

SAMPLERS: OLVIA

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
7:55		25.03	000	0.04	7.01	1.28	23.6	3.84	12.82	199
00 %		H	-		7.02	1,29	SIIC	(,17	13.28	521-
8:05					7.09	1.29	49.7	0.83	13,32	13/
8:10					11.7	1.39	43.3	0.66	13.36	-136
8:15					7.09	1,29	27.5	0.58	13.47	-137
8:20					7.09	1,38	23.3	0.53	13.51	-138
8:25					7.07	1.38	16.9	64.0	13.60	-138
8:30					7.09	1.38	14.4	64.0	13.56	041-
8:35			>		7.08	1,37	13,7	0.47	13.68	961-
8140					7,03	1,36	6.6	77.0	14.13	0711
8:45		SA	SAMPLED							

SITE NAME: 5 2+ 5 1,12 mg/l

LOW FLOW GROUNDWATER SAMPLING

WL: 26.37

Southeast Rockford, Area 11

DATE: 9/10/2020

N. Sala WEATHER CONDITIONS: 59 % TIME: DON 4:25

WELL#: MW -

DEPTH OF PUMP: SAMPLERS:

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
ふわかり		76.38	325	10.0	7.09	1.23	73.1	2,17	14.22	-221
1450					7.12	1,23	8.28	6.85	14.16	-232
1455					7.14	1,33	46.8	6.68	14.11	-336
1500					7,13	1.33	43.6	96.9	61.41	-334
5051					7.14	1,22	39.1	80.9	[4.20	-233
1510					7.14	123	30.6	5.77	12.41	-23(
SISI					7,14	1,24	28.6	5.95 14.23	14.23	-229
15,20					7.14	1,25	22.8	5.80	14.24	1228
1525					7.13	1.26	18.6	15.5	14.25	1-255
1530					7.14	- LS	18.1	5.20	14.26	22
1535			7	•	7.13	1.38	13.0	16.4	14.35	1236
15'do					7.13	ار مرم	8.11	cl.65	9261	900-
1545					7.13	86	8,6	1.8 4.50	44. pl	386

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.

1550 SAMPLES COLLECTET

Fe 2 + less than minimum range LOW FLOW GROUNDWATER SAMPLING

W. 26.00

Southeast Rockford, Area 11

SITE NAME:

WELL#: MW - 4R

DEPTH OF PUMP: 1000

WEATHER CONDITIONS:

TIME:

DATE: 9/9/2020

SAMPLERS: Math

15:30  15:30  15:30  15:30  15:30  15:30  15:30  15:30  16:00  16:00  16:00  16:00  16:00  16:00  16:00	VOLUME DEPTH PURGED TO WATER FLOW RATE (GALS) (FT TIC)	DRAWDOWN TE FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
	-	0.03	7.26	0.304	18.6	3.47	14.40	-11
			6.86	1.0 y	7.7	2.40	14.17	-6(
			7,00	1,21	16.5	2.52	14.00	724
			6.92	[, 15	15.1	2.37	13.91	-26
			6.88	1.2	(4.9)	2.58	13.86	4-
			6.97	hで)	14.0	2,56	13.93	7-
			7.02	1.26	15.7	2.57	13,97	b
	-	6	7.04	127	15.7	2.59	[4.07	15
	>	)	7,06	1,23	4,9	2.70	4.03	25
			7.04	1,24	4.2	7.65	(4.00	2
			7.04	1.25	13.5	2.76	14.06	38
40.7 SE 01			40.7	50)	13.1	2,80	14.05	11

W 25.56

Fe 34: 1655 John Minner Migh LOW FLOW GROUNDWATER SAMPLING

Southeast Rockford, Area 11

SITE NAME:

WELL#: ML

DEPTH OF PUMP: WEATHER CONDITIONS: DATE: TIME:

SAMPLERS: John

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
12: 45		25.56	425	0.00	7,07	1,08	300	5.03	15.05	99
13:50					7.04	1.33	165	4.91	14.64	19
13.55					7.01	1.33	137	4.79	14.81	89
13:00					6.90	1,33	67.3	4.75	P1.79	81
13.05					6.79	1.33	54.3	4.53	14.47	83
13:10					6.85	1.35	48.4	4.40	5h. HI	83
13:16					6.75	1.36	43.9	01.10	14.35	85
13:30					6.91	1.35	33.6	3.95	14.36	76
13:35					86.9	1.25	8.16	3.92	14.39	76
13:30					66.99	1,36	16,99	3,83	14.38	77
13:35					7.00	1,36	0.01	3.73	14.43	18
13:40			SAMPLED	LED						

Fe 2+ = 2.19 mg/L

#### LOW FLOW GROUNDWATER SAMPLING

St. SE. 73

Southeast Rockford, Area 11 SITE NAME:

SAMPLERS: () I'via Rule DEPTH OF PUMP: WELL #: WEATHER CONDITIONS: 8 5 DATE: TIME

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
11:10		75.77	275	600	6.92	1.39	L.12	2.59	H-75	L//-
11:15			-	-1	6.91	1,38	111	28.0	14.95	-123
11:20					6.31	1,37	(6.3)	6.67	L8.7)	- (25-
(I. BOOK					6.95	1,36	1.7.1	0,56	14.94	-178
11:30					6.95	1,36	(3.0	45.9	15.0]	124
1:3					6.82	1.36	13.8	45.0	14.90	-123
11: YO					189	1,36	(2,3	6.49	(4.88	- 133
11:45-	SAMPLES	107 53	したいし	ED						
			3	>						

Ow GROUNDWATER SAMPLING Southeast Rockford, Area 11	WELL#: MW DEPTH OF PUMP:
Ver many to me thing to as we change the sampling to to me thing to site NAME: Southeast Rockford, Area 11	4.98
SITE NAME:	7 x 25 = (4.98
2+ = Overrange reduced to 10ml +	DATE: 9/10/2028
Fe 2+ C	DATE: 9/10

DEPTH OF PUMP:

Of UNE L SAMPLERS: Overcast WEATHER CONDITIONS: \$ 30 F

POTENTIAL (+/- 10 mv) - 195 30 1 33 REDOX 101--113 0 9 -123 113 0 14,43 14,77 14,73 14,34 93 00 (+/- 2 Co) 93 683 CC 5 14.88 ェ J I 7 7 DISSOLVED 3.63 OXYGEN (+/- 10%) 0.76 0,43 0.78 0.53 0.78 0.34 6.37 0.38 7.0 TURBIDITY 0.00 (+/-10%)73.8 46,34 NTUS 50 3.6 0 3.6 37.1 6.6 300 33 တိ (+/- 50 mS/cm) SPECIFIC COND. 3.13 200 9.33 2.05 1.94 1.96 1.97 1.97 3.01 2.01 ph (+/- 0.25 0.57 6.64 6.68 60.03 6,55 6.67 6.67 0.0 0.0 9.9 SU) DRAWDOWN (+/- 0.3 FT) FEET 00 00 FLOW RATE 000 TO WATER 54 (FT TIC) DEPTH 27 VOLUME PURGED (GALS) ELAPSED TIME (MIN) 10:15 10:05 10:10 10:25 10.20 10:35 04:01 10:30 05:01 54:01

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU.

(4)

2

T

10:55

SITE NAME: Southeast Rockford, Area 11

81.61.3

WEATHER CONDITIONS: SSF Clouds, who are started and a conditions and a conditions. SSF clouds, who are started burked to water flow rate in gallon burked for some and a conditions are a conditions and a conditions are a conditions and a conditions and a conditions are a conditions and a conditions and a conditions are a conditions and a conditions and a conditions are a conditions and a conditions and a conditions are a conditions and a conditions and a conditions are a conditions are a conditions and a conditions are a conditions are a conditions are a conditions and a conditions are a conditions and a conditions are a conditi		DE	DEPTH OF PUMP:		P:		
SOLUME DEPTH TO WATER (GALS) (FT TIC) (GALS) (FT TIC) (GALS) (FT TIC) (GALS) (FT TIC) (GALS)	- Coning	SAI	SAMPLERS: John (	on Orabs,	Mat Car	Contamino, O	Divia Burks
19.56	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL MV (+/- 10 mv)
1 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4							
1 3 5 5 6	0.38	89-9	1.18	89.0	2.46	13,85	1
1 0 10 0 10 5	0.57	6.77	1.18	8.8.9	14.8	13.87	9/
		6.82	81-1	36.4	2.39	1505	4
9.30 9.35 9.40 9.45		88.9	<i>∞</i> – .	25.6	2.53	13.89	20
9.35 9.40 9.45		069	<u>∞</u>	19.6	2.36	14-14	(7
9:40 9:45		6.89	811	16.0	2.35	14.22	<u>-</u> γ
9: 45-		6.77	00)	5.5	2.4x	1399	74
47 0		6.74	8) 1	h []	246	18:81	23
1.50		6.69	1.18	9.8	2.44	13.85	50
A.SS SAMPLES CO	COLLECTED						



Southeast Rockford, Area 11 SITE NAME:

Fe 24 O. 19 mg/ Sphcwl 20.16

×هر ري DEPTH OF PUMP: SAMPLERS: WELL #: 02 WEATHER CONDITIONS: DATE:

											F
ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP 0C (+/-5 C°)	REDOX POTENTIAL mV (+/- 10 mv)	
25	8:32 BACK	ON THE STATE OF TH	380	5.12	7,21	1.10	h-58	3,78	492	28	1
Ø √0					733	カー・)	784	2.15	9.97	28	
8 dc					25'1	٠	1.05	0)	<u>~</u>	Ŋ	
800					-3	Personal Per	in .	25.5	h   S	(~)	
852					7.09	1,17	801	0,40	16.57	.7.0	
900					773			9)	TS 01	: 73	
405					1,79	L 2	4.679	3.61	10.67	7.	
410					7.81	The space of the s	F. 9.5	1	10. 45-	-73	
9.15					7.34	Married Married	٦, ٧	C.P.	S W W	-23	
d. 70					7.86	None and	してさ	2.13	1.2.0	ر در در	
マスト					7.88	1.17	7	2.107	10,91	-12	
9.50					7.89	-	31.8	87.18	2	-22	
Ç	1 40 4	-									_

JOB NO.

COMPUTED BY

PG 2872

#### LOW FLOW GROUNDWATER SAMPLING

MIN DEPTH OF PUMP: Southeast Rockford, Area 11 SAMPLERS: WELL #: SITE NAME: 02/10/21 WEATHER CONDITIONS:

DATE: TIME:

REDOX	POTENTIAL mV (+/- 10 mv)	4								_	
REI	POTE (+/- 1)	12.53	8/	á	20						
TEMP	(+/- 5 C°)	12.55	High	12.11	12.08						
DISSOLVED	OXYGEN mg/L (+/- 10%)	5.75	br.3	472	5.69			-10-m			
TURBIDITY	NTUs (+/- 10%)	4.0E	hĽl	15.8	12.0						
SPECIFIC	COND. (+/- 50 mS/cm)	1.20	1.20	1.19	1.19						
	(+/- 0.25 SU)	8.01	8.01	8.01	8.03						
DRAWDOWN	FEET (+/- 0.3 FT)										
	FLOW RATE					R					
DEPTH	TO WATER (FT TIC)					SAMPLES COLLECTED					
VOLUME	PURGED (GALS)	8.25gd	8.75 gal	Joel	9.2592	SAMPLES					
EL APSED	TIME (MIN)	15:11	15.16	15:21	15:26	15:31					

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.

ferrous Iran 0.0

Fe<sup>2+</sup>: 2.70 mg/L

Southeast Rockford, Area 11 SITE NAME: WELL #: ///シ Oのス DEPTH OF PUMP: WEATHER CONDITIONS: Party DATE: (7)

43°F

SAMPLERS:

POTENTIAL (+/- 10 mv) -93 -106 REDOX 76-0/1 001-711-801-S S 76-109 (ኤ 13,85 13.67 13.77 13.97 (3.22 14.02 13.61 14.15 14,15 (+/-5 C°) 13.91 14.18 TEN S° 7.7 DISSOLVED 0.42 mg/L (+/- 10%) ひた。の 0.50 0.45 0.43 OXYGEN 0.47 5 0, 40 0.39 16.0 0.56 901 *,* 423,5 TURBIDITY 47.7 92.0 31.00 (+/-10%)32.7 55.4 49.8 66,2 100 120 (+/- 50 mS/cm) SPECIFIC COND. 1.43 (S.2) 1.45 1,45 1.43 1-45 1,43 1.50 85.1 1.45 1,44 1.95 ph (+/- 0.25 7-17 7.04 6.94 6.30 7.07 7.18 7.13 7,06 7.19 7.26 7.14 S 7.11 DRAWDOWN FEET (+/-0.3 FT)**FLOW RATE** 350 ς, 8 TO WATER 85.56 DEPTH (FITIC) VOLUME PURGED (GALS) 12:55 ついいつ 13:00 13:05 TIME (MIN) 07:20 0,40 ELAPSED 13:33 いらい 12:18 54:45 7.5 5:0

1,54×2,5

79

Southeast Rockford, Area 11

SITE NAME:

WELL#: MW 3

SAMPLERS: 1/2 ∰ DEPTH OF PUMP: WEATHER CONDITIONS: DATE: 12 /2 | 2020

	VOLUME	DEPTH		DRAWDOWN	qd	SPECIFIC	TURBIDITY	DISSOLVED	TEMP	REDOX
TIME (MIN)	PURGED (GALS)	TO WATER (FT TIC)	FLOW RATE	FEET (+/- 0.3 FT)	(+/- 0.25 SU)	COND. (+/- 50 mS/cm)	NTUs (+/- 10%)	OXYGEN mg/L (+/- 10%)	(+/-5 C°)	POTENTIAL mV (+/- 10 mv)
300		25.19	378-	10.07	7.25	1.35	226	2.10	(0.37	-132
<u> 386</u> 2					7.47	1.35	104	1-16	10.30	-143
3,70			parameter of the second se	-may Size 17 for	857	1.35	1-55	16.91	11.23	761-
3/5				n, ny zavovění kod	7.31	1.35	32.4	0.82	15-11	141-
820					7.41	1,35	30%	0.37	10.64	hh!-
815				S 1131	7.49	1.35	j4.4	8.4.0	871	15-1
\$30					7.56	1.35	11.5	590	11.17	-155
835				To this will be a supply to	7.49	1.34	9.4	3.67 11.83	11.83	-157
340		* * * * * * * * * * * * * * * * * * *		was in the second	252	h£ '!	7.0	J.62	1.75	- 148
345	SAMPLES	~	CALACIED							
			e surgerate							
			7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -							

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in

parentheses. Turbidity +/- 10% or less than 5 NTU.

[e 12. 2.c1 ms/

Southeast Rockford, Area 11 SITE NAME: WELL#: MW C/ A DEPTH OF PUMP: SAMPLERS: WEATHER CONDITIONS: Particularies DATE: TIME:

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUS (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
14.20		27.27	330	0.39	7.59	1.31	155		13.98	-292
1425		•			7.75	1.30	65.3	4.11	13.65	862-
1430					7.53	1.30	35.2	3,29	13.41	-284
1435		ما داده می واید			7.44	1.31	17.7	2.85	13.17	-280
0hh			an ay		7.73	154	9.2	d.s4	12.35	-290
Shhl			propose any activity		7.58	1.32	7.5	850	12.73	-276
1450		4. E.	and the second s		7.59	1-33	5.8	0.56	12.36	279
1455					7.43	1.34	3.6	h5-0	12.34	-276
1500	SAMPLE	SAMPLES ACOURCIED	3C 7ED							

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five parentheses. Turbidity +/- 10% or less than 5 NTU. Febr. 0.73 mg/

# **LOW FLOW GROUNDWATER SAMPLING**

Southeast Rockford, Area 11

WELL#: MW 4B DEPTH OF PUMP: SAMPLERS: SITE NAME: 34°F WEATHER CONDITIONS: Cle TIME: (7:7 DATE: (2/)

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUs (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
15:40		PM 26.95	cap	0.02	6)2	(,2م	464	16.61	9.46	1/2
ShSI			•		7.29	۲۵.)	200	8.46	9.37	0
1220					7.31	ا.32	ا دط	7,40	9.93	25
1556					-527	321	<b>1</b>	6.69	9.95	5
1600					7,43	01.40	8.66	6.28	4,39	25
1605					المك	ા, વે૦	2.28	5-60	-563	67
1610					7.39	1,40	[OB	5.13	06'6	65
1620					7.38	(4)	74.0	4.97	10.17	82
1625	7,7,7,7,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1		THE PASSE OF THE P		7.38	1.41	52.0	4.74	16.32	46
1630					٦.3٦	1.39	8,012	4.5-	10.72	95
1635					7.36	1.39	31.	4.36	(७.७५	80
1640					7.39	(.4c	320	4.15	16.93	<b>के</b>

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.

# LOW FLOW GROUNDWATER SAMPLING

Fe 2+: 0.03 mg/L

Southeast Rockford, Area 11 SITE NAME: WELL #: MW OOS SAMPLERS: MAH DEPTH OF PUMP: WEATHER CONDITIONS: Cle DATE: TIME:

ELAPSED	VOLUME	DEPTH TO WATER	FLOW RATE	DRAWDOWN FEET	ph (+/- 0.25	SPECIFIC COND.	TURBIDITY NTUS	DISSOLVED OXYGEN	TEMP	REDOX POTENTIAL
IIME (MIN)	(GALS)	(FT TIC)		(+/- 0.3 FT)	SU)	(+/- 50 mS/cm)	(+/- 10%)	(+/- 10%)	(+/-5 C°)	(+/- 10 mv)
0261		76.47	800	6.2	6.40	1,41	237	9,08	16.12	1237
SSEI			•		6.92	1.49	313	5.63	1-5-1	137
(30 c)					7.01	1.48	L07	2.50	11. 99	[4]
1305			-	<b>A</b>	7.16	2r.)	66	5.27	10.18	146
95)	:				7.13	1. 48	<b>う</b> と )	5.17	8/0.11	0_5 1
1315					7.15	('d)	901	80:5	\{\delta\)	(52
13,30				To Mark Calls and I have been	7.15	( ، داً ٦	65.7	80.5	ر29.1)	155
7551					7.15	8h')	C8.5-	2.05	ा.पड	LS1
1330					7.16	1.09	6 4.8	5.12	10.93	95)
1335		_			े. १५	1.50	45.6	5.03	13.(S	اکم
1340					7.15	1.50	4 l.ı	d-9 6	اه ک)	120
3/12/					7.16	١, دام	39.9	4.85	12.84	09]
		•	1			•				

1350 SAMPLES COLLECTED
Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.

## LOW FLOW GROUNDWATER SAMPLING

State water loved 26.57 DEPTH OF PUMP: Southeast Rockford, Area 11 SAMPLERS: WELL #: SITE NAME: WEATHER CONDITIONS: DATE: TIME:

EI ADSEN	VOLUME	DEPTH		DRAWDOWN	фф	SPECIFIC	TURBIDITY	DISSOLVED	TEMP	REDOX
TIME (MIN)	PURGED (GALS)	TO WATER (FT TIC)	FLOW RATE	FEET (+/- 0.3 FT)	(+/- 0.25 SU)	COND. (+/- 50 mS/cm)	NTUs (+/- 10%)	mg/L (+/- 10%)	(+/- 2 C <sub>o</sub> )	mV (+/- 10 mv)
126	19,ch		500 m	4	7.87	וילאין	7 b. S	3.04	12.35	五)-
1131	2 gal		<b>1</b>		288	1.43	23.1	7.55	12.62	-139
1136	2.5gel				7.90	1,41	13.6	85.1	12.61	-142
141	3.5gal				791	1.40	11.5	1.45	12.64	-145
9411	4.5gd		<b>→</b>		162	1.39	8.4	1.43	1236	96/-
1511	4.75gal				291	1.39	6.4	1.39	12.73	-147
1156	Spal				8.03	1.39	5.0	1.42	12.62	661-
1201	5.25 and		À		7.94	1.38	3,8	1.35	12.35	-150
1206	5.5gul				7.92	1.38	2.7	1.33	12.66	-150
111	,		SAMPI	んた						

Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in parentheses. Turbidity +/- 10% or less than 5 NTU.

abiz snowy

# **LOW FLOW GROUNDWATER SAMPLING**

WL 25-41

Southeast Rockford, Area 11 SITE NAME: \_\_

F-2+: 2,86 mg/L

WELL#: /MW 067

DEPTH OF PUMP: SAMPLERS: Ckar 230F DATE: (3/2/2020 WEATHER CONDITIONS:

ELAPSED TIME (MIN)	VOLUME PURGED (GALS)	DEPTH TO WATER (FT TIC)	FLOW RATE	DRAWDOWN FEET (+/- 0.3 FT)	ph (+/- 0.25 SU)	SPECIFIC COND. (+/- 50 mS/cm)	TURBIDITY NTUs (+/- 10%)	DISSOLVED OXYGEN mg/L (+/- 10%)	TEMP °C (+/- 5 C°)	REDOX POTENTIAL mV (+/- 10 mv)
0 0		17.50	Q_5 h	0.03	259	55.	76	6.79	16.20	181
1015		<b>st</b> €m.	- المعلق		6.86	1.39	206	3.17	11.65	-93
0501			Processory (Acad page 1991)	-	6.87	1.39	125	13.3H	11.84	701-
(025 <sup>-</sup>		a year of the same	in approximate four g a res	Ратов прода прода пр	6.93	1.36	5hL	1.46	11.97	911-
(030		M. Service Annual Property Company	er with remarkers March	# Old Annual Opposite Annual A	6.97	1.37	44.4	1.15	12.31	8//-
1035		The Boardine Boardine	and the second s	72	6.96	1.37	818	75.0	12.16	-126
1040		100 K			6.95	1.38	31.3	0.54	12.35	-127
Sho)			NACES TO CONTRACT AND		6.86	1.39	28.4	0.53	12.28	-124
1050	SANPLO	SAMPLES COLLECTED	CTED		7.07	1.38	70.7	0.50	12.57	-128

minutes. The well is considered stabilized and ready for sampling when the indicator parameters have stabilized for three consecutive readings by the measurements indicated in Drawdown is not to exceed 0.3 of a foot. Flow rate should not exceed 500 ml/min during purging or 250 ml/min during sampling. Readings should be taken every three to five

parentheses. Turbidity +/- 10% or less than 5 NTU.

### Appendix C

Data Validation Reports and Data Packages



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### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

Sample Delivery Group (SDG) Number: E200303 Laboratory: ESAT / Tech Law Matrix: Groundwater Collection date: 03/03/2020 & 03/04/2020 Analysis/Methods: 1,4-Dioxane - SW-846 8000D SIM Samples in SDG: Sample Number Sample Number Lab ID Lab ID E200303-01 A11-TB002-200304 E200303-07 A11-MW004B-200303 E200303-02 A11-FB001-200303 E200303-08 A11-MW005-200303 E200303-03 A11-MW001-200303 E200303-09 A11-MW006-200303 E200303-04 E200303-10 A11-MW007-200304 A11-MW002-200304 E200303-05 A11-MW003-200304 E200303-11 A11-MW007-200304-D E200303-06 A11-MW004A-200304 E200303-12 A11-TB001-200303 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017). Volatile Organic Compounds 8260 / 1,4-Dioxane 8000D Precision: Yes No N/A Yes Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Yes Laboratory Control Spike Duplicates RPD within limits? No Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): Field %RPD **Qualifiers** Associated Samples Sample **Duplicate Duplicates** A11-MW007-A11-MW007-200304-200304 D Acceptable MS/MSD %RPD Limit **Qualifiers** Associated Samples E20C007-MS1 / MSD1 Acceptable (200303-04) E20C007-MS2 / MSD2 Acceptable (200303-08)LCS/LCSD %RPD Limits **Qualifiers Associated Samples** N/A **Laboratory Duplicate** %RPD **Limits Qualifiers** Associated Samples N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) No Laboratory Control Sample criteria met? No Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? No Was the ICAL criteria met? No Was the CCV criteria met? Nο Was the Tuning criteria met? Yes Were the Surrogate % recoveries within laboratory determined control limits? Yes Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): **Blanks** Concentration MDL/PQL **Qualifiers Associated Samples** E20C007-BLK1 Nondetect

Field Blank		Concentration	MDL / PQL		<b>Qualifiers</b>	Associated Samples	
A11-FB001-200303		Nondetect					
A11-TB001-200303 A11-TB002-200304		Nondetect Nondetect					
ATT-TD002-200304		INONGETECT					
Surrogates		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
		Acceptable					
MS/MSD		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
E20C007-MS1 / MSD1		Acceptable					
(200303-04)							
E20C007-MS2 / MSD2		Acceptable					
(200303-08)							
LCS/LCSD		<u>%R</u>	Limits		Qualifiers	Associated Samples	
E20C007-BS1		Acceptable	<u> </u>		<u>quamoro</u>	riocociatoa campico	
ICAL		RRF	%RSD	<b>Limits</b>	Qualifiers	Associated Samples	
November 20, 2019		Acceptable	Acceptable				
ICV / CCV		RRF	%D	Limite	Ouglifiors	Associated Samples	
3/10/2020 10:44		<u>RRF</u> Acceptable	<u>אש</u> Acceptable	<u>Limits</u>	<u>wuaiillers</u>	Associated Samples	
3/10/2020 10:44		Acceptable	Acceptable				
3/11/2020 10:14		Acceptable	Acceptable				
3/11/2020 10:14		Acceptable	Acceptable				
572020 1.20		, locopiusio	, 1000ptable				
Tune							
Acceptable							
MRL Check			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
E20C007-MRL1			Acceptable				
			Area Lower / Upper				
Internal Standards		<u>Area</u>	Limit Acceptable		Qualifiers	Associated Samples	
			·				
presentativeness: ere sampling procedures and	l design criteria met?						Yes No N/A
ere holding times met?	-						Yes
as preservation criteria met?							Yes
ere Chain-of-Custody records							Yes
mments (note deviations): T	The cooler temperature v	was -0.8 ° C.					
		Cooler	Preservation				
Preservation		Temperature (D)	Criteria		<u>Qualifier</u>	Associated Samples	
		(Degrees C)					
		Acceptable					
Holding Times	Analyte	Days to Extraction	HT Criteria		Qualifier	Associated Samples	
Ū	<del></del>	Acceptable	<u>-</u>				
man a va bilita v							Vac No N//
mparability:	d mothodo fellowed at d	ofined in the OADD	field change desum	ation?			Yes No N/A
re analytical procedures and mments (note deviations):	a methods tollowed as d	elinea in the QAPP or	пета спапде documenta	ation?			Yes
mpleteness (90%):							Yes No N//
e all data in this SDG usable?	?						Yes
mments (note deviations):	•						163

Comments (note deviations):

Sens	itiν	/itv:	

Are MDLs present and reported?

Do the reporting limits meet project requirements?

<u>Comments (note deviations):</u>

Yes No N/A Yes Yes

Comment:

Data is usable as reported.

Data Validator:Kristine MolloyDate: 4/3/2020Data Reviewer:Cherie ZakowskiDate: 4/5/2020



Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Howard Pham Mar-18-20 15:26

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-TB002-200304 (E200303-01)		Matrix: W	ater	Sampled: M	ar-04-20	08:00	Received: Mar	-05-20 13:30	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.221	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.780			70.5%		70-130	"	"	"

A11-FB001-200303 (E200303-02)		Matrix: W	ater	Sampled: M	ar-03-20	17:00	Received: Mar	-05-20 13:30	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.202	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.759			75.3%		70-130	"	"	"

A11-MW001-200303 (E200303-03)		Matrix: \	Water	Sampled: I	Mar-03-20	09:20	Received: Ma	ır-05-20 13:3	)
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	6.85			0.202	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.802			79.6%		70-130	"	"	"

A11-MW002-200304 (E200303-04)		Matrix: \	Water	Sampled: I	Mar-04-2	0 13:35	Received: Ma	ar-05-20 13:3	D
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	3.31			0.203	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.891	_		87.7%		70-130	"	"	"

A11-MW003-200304 (E200303-05)		Matrix: \	Water	Sampled: I	Mar-04-20	09:05	Received: Ma	ar-05-20 13:3	0
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	8.57			0.202	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.822			81.6%		70-130	"	"	"

Report Name: E200303 E\_Analysis\_v12 FINAL Mar 18 20 1526



Surrogate

1,4-Dioxane-d8

TechLaw Inc ESAT Region 5 536 South Clark Street, Suite 734 Chicago, IL 60605 (312) 353-8303 (312) 353-5814 (Fax) www.techlawinc.com

Superfund, US EPA Region 5Project:SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION77 West Jackson BoulevardProject Number:ILD981000417Reported:Chicago IL, 60604Project Manager:Howard PhamMar-18-20 15:26

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

		Techi	Jaw - Es	SAI COHU	acı				
A11-MW004A-200304 (E200303-06)		Matrix	: Water	Sampled	: Mar-04-2	20 15:20	Received: N	/Iar-05-20 13:	30
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	1.41			0.203	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.789			77.6%		70-130	"	"	"
A11-MW004B-200303 (E200303-07)		Matrix	: Water	Sampled	: Mar-03-2	0 16:05	Received: N	/ar-05-20 13:	30
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	9.75			0.202	ug/L	1	E20C007	Mar-09-20	Mar-10-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.784			77.8%		70-130	"	"	"
A11-MW005-200303 (E200303-08)		Matrix: \	Water	Sampled:	Mar-03-20	13:40	Received: Ma	ar-05-20 13:3	)
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	5.35			0.202	ug/L	1	E20C007	Mar-09-20	Mar-11-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.856			84.9%		70-130	"	"	"
A11-MW006-200303 (E200303-09)		Matrix: \	Water	Sampled:	Mar-03-20	11:00	Received: Ma	ar-05-20 13:30	)
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	1.54			0.202	ug/L	1	E20C007	Mar-09-20	Mar-11-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.819			81.2%		70-130	"	"	"
A11-MW007-200304 (E200303-10)		Matrix: \	Water	Sampled:	Mar-04-20	11:20	Received: Ma	nr-05-20 13:30	)
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	3.38			0.203	ug/L	1	E20C007	Mar-09-20	Mar-11-20

Batch

Analyzed

Prepared

%REC

Limits

70-130

%REC

84.7%

Result

0.861



Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:

Chicago IL, 60604 Project Manager: Howard Pham Mar-18-20 15:26

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-MW007-200304-D (E200303-11)		Matrix	Matrix: Water		d: Mar-04	-20 11:20	Received: Mar-05-20 13:30		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	3.30			0.205	ug/L	1	E20C007	Mar-09-20	Mar-11-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.997			97.3%		70-130	"	"	"

A11-TB001-200303 (E200303-12)		Matrix: W	ater	Sampled: M	ar-03-20	08:00	Received: Mar		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.207	ug/L	1	E20C007	Mar-09-20	Mar-11-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.848			82.0%		70-130	"	"	"

Report Name: E200303 E\_Analysis\_v12 FINAL Mar 18 20 1526



Superfund, US EPA Region 5
77 West Jackson Boulevard
Chicago IL, 60604

Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION

Project Number: ILD981000417 Reported:

Project Manager: Howard Pham Mar-18-20 15:26

## 1,4-Dioxane by GC-MS - Quality Control TechLaw - ESAT Contract

Batch E20C007 - EPA 522

Blank (E20C007-BLK1)			I	Prepared: Ma	ar-09-20 <i>A</i>	nalyzed: N	1ar-10-20				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	U			0.200	ug/L						
Surrogate: 1,4-Dioxane-d8	0.766				"	1.00		76.6%	70-130		

LCS (E20C007-BS1) Prepared: Mar-09-20 Analyzed: Mar-10-20 RPD Flags / Spike %REC Reporting Source MDL RPD %REC Limit Analyte Result Qualifiers Limit Units Level Result Limits 0.764 0.200 1.00 76.4% 70-130 1,4-Dioxane ug/L Surrogate: 1,4-Dioxane-d8 1.00 72.8% 70-130 0.728

MRL Check (E20C007-MRL1) Prepared: Mar-09-20 Analyzed: Mar-10-20 RPD Flags / Spike %REC Reporting Source Result Qualifiers MDL Limit Units Level Result %REC Limits RPD Limit Analyte Q 0.200 0.200 50-150 1,4-Dioxane U ug/L % Surrogate: 1,4-Dioxane-d8 0.738 1.00 73.8% 70-130

Matrix Spike (E20C007-MS1)	Source:	E200303-04	1	Prepared: Ma	ır-09-20 <i>A</i>	nalyzed: N	1ar-10-20				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	4.19			0.207	ug/L	1.03	3.31	85.7%	70-130		
Surrogate: 1,4-Dioxane-d8	0.911				"	1.03		88.2%	70-130		

Matrix Spike (E20C007-MS2)	Source:	E200303-08	I	Prepared: Ma	ar-09-20 <i>A</i>	nalyzed: N	Iar-11-20				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	6.32			0.203	ug/L	1.02	5.35	95.4%	70-130		
Surrogate: 1,4-Dioxane-d8	0.822				"	1.02		80.9%	70-130		

Matrix Spike Dup (E20C007-MSD1)	Source:	E200303-04	]	Prepared: Ma	ar-09-20 <i>A</i>	nalyzed: N	1ar-10-20				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	4.16			0.205	ug/L	1.02	3.31	83.4%	70-130	2.66	30
Surrogate: 1,4-Dioxane-d8	0.880				"	1.02		85.9%	70-130		



Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Howard Pham Mar-18-20 15:26

## 1,4-Dioxane by GC-MS - Quality Control TechLaw - ESAT Contract

#### **Batch E20C007 - EPA 522**

Matrix Spike Dup (E20C007-MSD2)	Source:	E200303-08	]	Prepared: M	ar-09-20 <i>A</i>	nalyzed: N	/Iar-11-20				
	_	Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	6.34			0.203	ug/L	1.02	5.35	97.0%	70-130	1.71	30
Surrogate: 1,4-Dioxane-d8	0.859				"	1.02		84.6%	70-130		

Report Name: E200303 E\_Analysis\_v12 FINAL Mar 18 20 1526



Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Howard Pham Mar-18-20 15:26

#### **Notes and Definitions**

U Not Detected

NR Not Reported

Q QC limit Exceeded

Report Name: E200303 E\_Analysis\_v12 FINAL Mar 18 20 1526

#### Southeast Rockford Area 11 - Groundwater Samples **Data Validation Report**

Sample Delivery Group (SDG) Number: Laboratory:

E200306

ESAT - US EPA Region 5 LSASD Analytical Services Branch

Matrix: Groundwater

Collection date: 03/03/2020 & 03/04/2020

Analysis/Methods:

Volatile Organic Compounds (VOCs) 8260

Samples in SDG:

<u>Lab ID</u>	Sample Number	<u>Lab ID</u>	Sample Number
2003006-01	A11-TB002-200304	2003006-07	A11-MW004B-200303
2003006-02	A11-FB001-200303	2003006-08	A11-MW005-200303
2003006-03	A11-MW001-200303	2003006-09	A11-MW006-200303
2003006-04	A11-MW002-200304	2003006-10	A11-MW007-200304
2003006-05	A11-MW003-200304	2003006-11	A11-MW007-200304-D
2003006-06	A11-MW004A-200304	2003006-12	A11-TB001-200303

Data validation was performed in accordance with the specific analytical method and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017).

#### Volatile Organic Compounds 8260 / 1,4-Dioxane 8000D

Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? No Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Yes Laboratory Control Spike Duplicates RPD within limits? No Laboratory Duplicate RPDs within limits? N/A Comments (note deviations):

Field Duplicates		<u>Sample</u> A11-MW007- 200304	<u>Duplicate</u> A11-MW007-200304- D	<u>%RPD</u>	Qualifiers	Associated Samples
	1,3,5-Trimethylbenzene	4.84	4.57	NC	None	
	Isopropylbenzene	12	11	NC	None	Sample results < 5xs RL; ABS Diff. < RL
	n-Propylbenzene	6.68	6.03	NC	None	
MS/MSD B20C019-MS1 / MSD1 (2003006-04RE1)		<u>%RPD</u> Acceptable	<u>Limit</u>		Qualifiers	Associated Samples
B20D016-MS1 / MSD1 (2003006-08RE2)		Acceptable				
LCS/LCSD		%RPD	<u>Limits</u>		Qualifiers	Associated Samples
B20C012-BS1 / BSD1		Acceptable				
B20C019-BS1 / BSD1	1.1-Dichloroethene	21.8	20%		J**	
2200010 2017 2021	2,2-Dichloropropane	55.3	20%		J**	2003006-03RE1 through 2003006-
	Hexachlorobutadiene	21.3	20%		J**	06RE1, 2003006-10RE1,
	n-Butylbenzene	23.2	20%		J**	2003006-11RE1
B20C016-BS1		Acceptable				
	**Sample results nondeted	ct - no qualifiers req	uired.			
Laboratory Duplicate N/A		<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples

Accuracy: Was the Matrix Spike/Matrix Laboratory Control Sample of Were the Laboratory Method Were the Field Blanks results Was the ICAL criteria met? Was the CCV criteria met? Was the Tuning criteria met? Were the Surrogate % recov Were the Internal Standard a Comments (note deviations)	oriteria met? I Blank results all < RL? Is all < RL?		laboratory determin	ned control limi	ts)	-	Yes No N/A No No Yes No No No Yes Yes No No No No Yes Yes N/A
Blanks E20C012-BLK1 E20C012-BLK2 E20C019-BLK1 E20C019-BLK2 E20C016-BLK1		Concentration  Nondetect  Nondetect  Nondetect  Nondetect  Nondetect  Nondetect	MDL /PQL		Qualifiers	Associated Samples	
Field Blank A11-FB001-200303		Concentration Nondetect	MDL / PQL		Qualifiers	Associated Samples	
A11-TB001-200303	cis-1,2-Dichloroethene	2.33	0.43 / 2.0		None	Sample results nondetect	t
A11-TB002-200304	cis-1,2-Dichloroethene	2.2	0.43 / 2.0		None	Sample results nondetec	
Surrogates		%R Acceptable	<u>Limit</u>		Qualifiers	Associated Samples	
MS/MSD B20C019-MS1 / MSD1 (2003006-04RE1)	Carbon Disulfide	<u>%R</u> 60.5 / 58.6	<u>Limits (%)</u> 60-110		Qualifiers J / UJ	Associated Samples 2003006-04RE1**	
B20D016-MS1 / MSD1 (2003006-08RE2)		Acceptable					
		*	*Results reported from	om 2003006-0	4 - no qualific	ation required	
LCS/LCSD B20C012-BS1 / BSD1		<u>%R</u> Acceptable	<u>Limits</u>		Qualifiers	<u>Associated Samples</u>	
B20C019-BS1 / BSD1							
	Acetone	146 / 136	70-130		J**	2003006-03RE1 through 06RE1, 2003006-10RE1,	
	2,2-Dichloropropane	110 / 62.6	70-130		J / UJ	2003006-11RE1	
B20D016-BS1	Bromomethane	65.2	70-130		J / UJ	2003006-05RE2 through 2003006-09RE2	I
	**Sample results nondetec	t - no qualifiers require	ed.				
ICAL 3/5/2020 13:53	1,1-Dichloroethene Carbon Disulfide Carbon Tetrachloride Tetrachloroethene 1,1,1-Trichloroethane  **Sample results nondeted	RRF Acceptable Acceptable Acceptable Acceptable Acceptable Acceptable	%RSD 22.52 20.18 26.45 21.62 20.67	Limits 20 20 20 20 20 20	Qualifiers  J**  J**  J**  J**  J**	Associated Samples All samples All samples All samples All samples All samples	
ICV / CCV		RRF	<u>%D</u>	<u>Limits</u>	Qualifiers	Associated Samples	
ICV 3/05/2020 17:56	Acetone	Acceptable	96.5	40	J / UJ	All samples	
3/05/2020 2:38		Acceptable	Acceptable				

CCV							
3/09/2020 8:39		Acceptable	Acceptable				
3/09/2020 17:15		Acceptable	Acceptable				
3/10/2020 17:12	Acetone	Acceptable	-46.5	40	J / UJ	2003006-03RE1 throug	
3/11/2020 4:24	Acetone	Acceptable	-35.6	40	J / UJ	06RE1, 2003006-10RE1 11RE1	, 2003006-
3/11/2020 10:40	Bromomethane	Acceptable	35.2	30	J / UJ		
3/11/2020 10:40	Carbon Disulfide	Acceptable Acceptable	35.2 28	30 25	J / UJ	2003006-05RE2 throug	h 2003006-
	Trans 1,3-Dichloropropane	Acceptable	20.2	20	J / UJ	09RE2	
	Trans 1,3-Dichioropropant	Acceptable	20.2	20	3 / 03		
MRL Check B20C012-MRL1			<u>%R</u> Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
<b>Tune</b> Acceptable							
Internal Standards		<u>Area</u>	Area Lower / Upper Limit Acceptable		Qualifiers	Associated Samples	
	· ·		Paramette.				Yes No N/A Yes Yes Yes Yes Yes
Preservation		Temperature (Degrees C) Acceptable	<u>Preservation</u> <u>Criteria</u>		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u> <u>C</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures Comments (note deviations)	and methods followed as defin	ed in the QAPP or fie	eld change document	tation?			Yes No N/A Yes
Completeness (90%): Are all data in this SDG usal Comments (note deviations)							Yes No N/A Yes
Sensitivity: Are MDLs present and reporting limits meet Comments (note deviations)	project requirements?						Yes No N/A Yes Yes
	nrative, samples were first scre				e subsequentl	y required. Each analyte	
	co-elution affected the calcula n ion led to the result being qua		•	mple 200300	06-05RE2. Po	tential	
As stated in the case na	rrative, no -BSD1 is associated	d with the B20D016 b	patch due to an error	in laboratory	instrument th	at was not noticed or	

As stated in the case narrative, no -BSD1 is associated with the B20D016 batch due to an error in laboratory instrument that was not noticed or corrected until after the time frame required by the SOP for a closing CCV.

Data is usable with appropriate qualifiers applied.

Data Validator:Kristine MolloyDate: 4/16/2020Data Reviewer:Cherie ZakowskiDate: 4/18/2020



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB002-200304 (2003006-01)	TB002-200304 (2003006-01)		ater	Sampled: M	ar-04-20 0	8:00 Re	Received: Mar-05-20 14:45		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	2.20			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB002-200304 (2003006-01)		Matrix: W	ater	Sampled: M	ar-04-20 0	8:00 Re	ceived: Mar-	-05-20 14:45	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Chlorobenzene	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
sopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
1-Propylbenzene	U			2.00	"	"	"	"	"
-Chlorotoluene	U			2.00	"	"	"	"	"
,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
-Chlorotoluene	U			2.00	"	"	"	"	"
,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
ert-Butylbenzene	U			2.00	"	"	"	"	"
,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
ec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
o-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
,2-Dichlorobenzene	U			2.00	"	"	"	"	"
1-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Cymnocoto	Dagult			0/DEC		%REC	Datah	Duamanad	Analyzed
Surrogate  Dibromofluoromethane	Result 11.7			%REC		73-124	Batch	Prepared "	Anaryzeu "
Joromojiuoromeinane 1,2-Dichloroethane-d4	10.9			108%		84-122	"	"	"
							"	"	"
Toluene-d8	10.6			106%		88-108	"		"
4-Bromofluorobenzene	9.12			91.2%		84-108	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200303 (2003006-02)	Matrix: W	ater	ter Sampled: Mar-03-20 17:00			Received: Mar-05-20 14:45			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	n .	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	n n	"	"	"



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77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200303 (2003006-02)		Matrix: W	ater	Sampled: M	ar-03-20 1'	7:00 Re	ceived: Mar-	-05-20 14:45	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.8			108%		73-124	"	"	"
1,2-Dichloroethane-d4	10.7			107%		84-122	"	"	"
Toluene-d8	10.0			100%		88-108	"	"	"
4-Bromofluorobenzene	9.28			92.8%		84-108	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW001-200	0303 (2003006-03RE1)	Matrix: Water	Sampled: Mar-03-20 09:20	Received: Mar-05-20 14:45
		Elece /		

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20C019	Mar-10-20	Mar-10-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	4.51			2.00	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	6.74			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW001-200303 (2003006-03RE1) Matrix: Water Sampled: Mar-03-20 09:20 Received: Mar-05-20 14:45

1,1,1,2-Tetrachloroethane Ethylbenzene m+p-Xylene o-Xylene Styrene Bromoform Isopropylbenzene Bromobenzene	U U U U U U U U U U U U U U U U		2.00 2.00 4.00 2.00 2.00 2.00 2.00 2.00	ug/L	1	B20C019	Mar-10-20	Mar-10-20
m+p-Xylene o-Xylene Styrene Bromoform Isopropylbenzene	U U U U U U U U U U		4.00 2.00 2.00 2.00 2.00	" " " " " " " " " " " " " " " " " " " "	11 11 11	" " " " " " " " " " " " " " " " " " " "	"	11
o-Xylene Styrene Bromoform Isopropylbenzene	U U U U U U U U		2.00 2.00 2.00 2.00	" "	" " "	" " " " " " " " " " " " " " " " " " " "	" "	" "
Styrene Bromoform Isopropylbenzene	U U U U		2.00 2.00 2.00	"	" "	" "	"	"
Bromoform Isopropylbenzene	U U U		2.00	"	"	11	"	"
Isopropylbenzene	U U U		2.00	"	"	"		
	U U						"	"
Bromobenzene	U		2.00	"	"			
						"	"	"
1,2,3-Trichloropropane	U		2.00	"	"	"	"	"
n-Propylbenzene			2.00	"	"	"	"	"
2-Chlorotoluene	U		2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U		2.00	"	"	"	"	"
4-Chlorotoluene	U		2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U		2.00	"	"	"	"	"
tert-Butylbenzene	U		2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U		2.00	"	"	"	"	"
sec-Butylbenzene	U		2.00	"	"	"	"	"
1,3-Dichlorobenzene	U		2.00	"	"	"	"	"
p-Isopropyltoluene	U		2.00	"	"	"	"	"
1,4-Dichlorobenzene	U		2.00	"	"	"	"	"
1,2-Dichlorobenzene	U		2.00	"	"	"	"	"
n-Butylbenzene	U		2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U		2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U		2.00	"	"	"	"	"
Hexachlorobutadiene	U		2.00	"	"	"	"	"
Naphthalene	U		2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U		2.00	"	"	"	"	"
Surrogate	Result		%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.3		102%		73-124	"	"	"
1,2-Dichloroethane-d4	11.1		110%		84-122	"	"	"
Toluene-d8	9.78		97.8%		88-108	"	"	"
4-Bromofluorobenzene	9.03		90.3%		84-108	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200304 (2003006-04) Matrix: Water Sampled: Mar-04-20 13:35 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			100	ug/L	50	B20C012	Mar-06-20	Mar-09-20
Chloromethane	U			100	"	"	"	"	"
Vinyl chloride	U			100	"	"	"	"	"
Bromomethane	U			100	"	"	"	"	"
Chloroethane	U			100	"	"	"	"	"
Trichlorofluoromethane	U			100	"	"	"	"	"
1,1-Dichloroethene	U			100	"	"	"	"	"
Acetone	U			625	"	"	"	"	"
Carbon disulfide	U	(MS), L		100	"	"	"	"	"
Methylene chloride	U			100	"	"	"	"	"
trans-1,2-Dichloroethene	U			100	"	"	"	"	"
1,1-Dichloroethane	U			100	"	"	"	"	"
2,2-Dichloropropane	U			100	"	"	"	"	"
cis-1,2-Dichloroethene	U			100	"	"	"	"	"
2-Butanone	U			625	"	"	"	"	"
Bromochloromethane	U			100	"	"	"	"	"
Chloroform	U			100	"	"	"	"	"
1,1,1-Trichloroethane	U			100	"	"	"	"	"
Carbon tetrachloride	U			100	"	"	"	"	"
1,1-Dichloropropene	U			100	"	"	"	"	"
Benzene	U			100	"	"	"	"	"
1,2-Dichloroethane	U			100	"	"	"	"	"
Trichloroethene	U			100	"	"	"	"	"
1,2-Dichloropropane	U			100	"	"	"	"	"
Dibromomethane	U			100	"	"	"	"	"
Bromodichloromethane	U			100	"	"	"	"	"
cis-1,3-Dichloropropene	U			100	"	"	"	"	"
4-Methyl-2-pentanone	U			250	"	"	"	"	"
trans-1,3-Dichloropropene	U			100	"	"	"	"	"
1,1,2-Trichloroethane	U			100	"	"	"	"	"
Tetrachloroethene	U			100	"	"	"	"	"
1,3-Dichloropropane	U			100	"	"	"	"	"
2-Hexanone	U			250	"	"	"	"	"
Dibromochloromethane	U			100	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			100	"	"	"	"	"
Chlorobenzene	U			100	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			100	"	"	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200304 (2003006-04) Matrix: Water Sampled: Mar-04-20 13:35 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Styrene	U			100	ug/L	50	B20C012	Mar-06-20	Mar-09-20
Bromoform	U			100	"	"	"	"	"
Isopropylbenzene	121			100	"	"	"	"	"
Bromobenzene	U			100	"	"	"	"	"
1,2,3-Trichloropropane	U			100	"	"	"	"	"
n-Propylbenzene	215			100	"	"	"	"	"
2-Chlorotoluene	U			100	"	"	"	"	"
1,3,5-Trimethylbenzene	285			100	"	"	"	"	"
4-Chlorotoluene	U			100	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			100	"	"	"	"	"
tert-Butylbenzene	U			100	"	"	"	"	"
1,2,4-Trimethylbenzene	822			100	"	"	"	"	"
sec-Butylbenzene	U			100	"	"	"	"	"
1,3-Dichlorobenzene	U			100	"	"	"	"	"
p-Isopropyltoluene	U			100	"	"	"	"	"
1,4-Dichlorobenzene	U			100	"	"	"	"	"
1,2-Dichlorobenzene	U			100	"	"	"	"	"
n-Butylbenzene	U			100	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			100	"	"	"	"	"
1,2,4-Trichlorobenzene	U			100	"	"	"	"	"
Hexachlorobutadiene	U			100	"	"	"	"	"
Naphthalene	U			100	"	"	"	"	"
1,2,3-Trichlorobenzene	U			100	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.5			105%		73-124	"	"	"
1,2-Dichloroethane-d4	10.6			105%		84-122	"	"	"
Toluene-d8	10.3			103%		88-108	"	"	"
4-Bromofluorobenzene	10.6			106%		84-108	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200304 (2003006-04RE1) Matrix: Water Sampled: Mar-04-20 13:35 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Toluene	78600			4000	ug/L	2000	B20C019	Mar-10-20	Mar-10-20
Ethylbenzene	6840			4000	"	"	"	"	"
m+p-Xylene	19800			8000	"	"	"	"	"
o-Xylene	5100			4000	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.3			102%		73-124	"	"	"
1,2-Dichloroethane-d4	11.1			110%		84-122	"	"	"
Toluene-d8	9.76			97.6%		88-108	"	"	"
4-Bromofluorobenzene	9.45			94.5%		84-108	"	"	"

A11-MW003-200304 (2003006-05RE1) Matrix: Water Sampled: Mar-04-20 09:05 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethylbenzene	1500			400	ug/L	200	B20C019	Mar-10-20	Mar-10-20
m+p-Xylene	13000			800	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.4			104%		73-124	"	"	"
1,2-Dichloroethane-d4	11.2			111%		84-122	"	"	"
Toluene-d8	9.78			97.8%		88-108	"	"	"
4-Bromofluorobenzene	9.50			95.0%		84-108	"	"	"

A11-MW003-200304 (2003006-05RE2) Matrix: Water Sampled: Mar-04-20 09:05 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			20.0	ug/L	10	B20D016	Mar-10-20	Mar-11-20
Chloromethane	U			20.0	"	"	"	"	"
Vinyl chloride	U			20.0	"	"	"	"	"
Bromomethane	U	(LCS), J		20.0	"	"	"	"	"
Chloroethane	U			20.0	"	"	"	"	"
Trichlorofluoromethane	U			20.0	"	"	"	"	"
1,1-Dichloroethene	U			20.0	"	"	"	"	"
Acetone	U			125	"	"	"	"	"
Carbon disulfide	U			20.0	"	"	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-200304 (2003006-05RE2) Matrix: Water Sampled: Mar-04-20 09:05 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	D 1.	Flags /	MDI	Reporting		D'1 -('	D 4 1	D 1	A 1 1
	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Methylene chloride	U			20.0	ug/L	10	B20D016	Mar-10-20	Mar-11-20
trans-1,2-Dichloroethene	U			20.0	"	"	"	"	"
1,1-Dichloroethane	U			20.0	"	"	"	"	"
2,2-Dichloropropane	U			20.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			20.0	"	"	"	"	"
2-Butanone	U			125	"	"	"	"	"
Bromochloromethane	U			20.0	"	"	"	"	"
Chloroform	U			20.0	"	"	"	"	"
1,1,1-Trichloroethane	U			20.0	"	"	"	"	"
Carbon tetrachloride	U			20.0	"	"	"	"	"
1,1-Dichloropropene	U			20.0	"	"	"	"	"
Benzene	U			20.0	"	"	"	"	"
1,2-Dichloroethane	U			20.0	"	"	"	"	"
Trichloroethene	U			20.0	"	"	"	"	"
1,2-Dichloropropane	U			20.0	"	"	"	"	"
Dibromomethane	U			20.0	"	"	"	"	"
Bromodichloromethane	U			20.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			20.0	"	"	"	"	"
4-Methyl-2-pentanone	U			50.0	"	"	"	"	"
Toluene	38.4			20.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			20.0	"	"	"	"	"
1,1,2-Trichloroethane	U			20.0	"	"	"	"	"
Tetrachloroethene	U			20.0	"	"	"	"	"
1,3-Dichloropropane	U			20.0	"	"	"	"	"
2-Hexanone	U			50.0	"	"	"	"	"
Dibromochloromethane	U			20.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			20.0	"	"	"	"	"
Chlorobenzene	U			20.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			20.0	"	"	"	"	"
o-Xylene	U			20.0	"	"	"	"	"
Styrene	U			20.0	"	"	"	"	"
Bromoform	U			20.0	"	"	"	"	"
Isopropylbenzene	74.4			20.0	"	"	"	"	"
Bromobenzene	U			20.0	"	"	"	"	"
1,2,3-Trichloropropane	U			20.0	"	"	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-200304 (2003006-05RE2) Matrix: Water Sampled: Mar-04-20 09:05 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
n-Propylbenzene	76.0			20.0	ug/L	10	B20D016	Mar-10-20	Mar-11-20
2-Chlorotoluene	U			20.0	"	"	"	"	"
1,3,5-Trimethylbenzene	121			20.0	"	"	"	"	"
4-Chlorotoluene	U			20.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			20.0	"	"	"	"	"
tert-Butylbenzene	U			20.0	"	"	"	"	"
1,2,4-Trimethylbenzene	329			20.0	"	"	"	"	"
sec-Butylbenzene	27.8			20.0	"	"	"	"	"
1,3-Dichlorobenzene	U			20.0	"	"	"	"	"
p-Isopropyltoluene	U			20.0	"	"	"	"	"
1,4-Dichlorobenzene	U			20.0	"	"	"	"	"
1,2-Dichlorobenzene	U			20.0	"	"	"	"	"
n-Butylbenzene	23.7	J		20.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			20.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			20.0	"	"	"	"	"
Hexachlorobutadiene	U			20.0	"	"	"	"	"
Naphthalene	29.1			20.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			20.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.48			94.2%		73-124	"	"	"
1,2-Dichloroethane-d4	10.6			105%		84-122	"	"	"
Toluene-d8	9.37			93.7%		88-108	"	"	"
4-Bromofluorobenzene	10.2			102%		84-108	"	"	"

			-	Sampled: Mar-04-20 15:20			Received: Mar-05-20 14:45		
Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
45300			2000	ug/L	1000	B20C019	Mar-10-20	Mar-10-20	
Result			%REC		%REC Limits	Batch	Prepared	Analyzed	
9.61			95.5%		73-124	"	"	"	
10.9			108%		84-122	"	"	"	
9.86			98.6%		88-108	"	"	"	
8.80			88.0%		84-108	"	"	"	
	45300  Result 9.61 10.9 9.86	Result Qualifiers  45300  Result  9.61  10.9  9.86	Result Qualifiers MDL  45300  Result  9.61  10.9  9.86	Result         Qualifiers         MDL         Reporting Limit           45300         2000           Result         %REC           9.61         95.5%           10.9         108%           9.86         98.6%	Result         Qualifiers         MDL         Reporting Limit         Units           45300         2000         ug/L           Result         %REC           9.61         95.5%           10.9         108%           9.86         98.6%	Result         Qualifiers         MDL         Limit Limit Limit         Units         Dilution           45300         2000         ug/L         1000           Result         %REC         Limits           9.61         95.5%         73-124           10.9         108%         84-122           9.86         98.6%         88-108	Result         Qualifiers         MDL         Limit Limit         Units         Dilution         Batch           45300         2000         ug/L         1000         B20C019           Result         %REC         Limits         Batch           9.61         95.5%         73-124         "           10.9         108%         84-122         "           9.86         98.6%         88-108         "	Result         Qualifiers         MDL         Limit Limit         Units         Dilution         Batch         Prepared           45300         2000         ug/L         1000         B20C019         Mar-10-20           Result         %REC         Limits         Batch         Prepared           9.61         95.5%         73-124         "         "           10.9         108%         84-122         "         "           9.86         98.6%         88-108         "         "	

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-200304 (2003006-06RE2) Matrix: Water Sampled: Mar-04-20 15:20 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			50.0	ug/L	25	B20D016	Mar-10-20	Mar-11-20
Chloromethane	U			50.0	"	"	"	"	"
Vinyl chloride	U			50.0	"	"	"	"	"
Bromomethane	U	(LCS), J		50.0	"	"	"	"	"
Chloroethane	U			50.0	"	"	"	"	"
Trichlorofluoromethane	U			50.0	"	"	"	"	"
1,1-Dichloroethene	U			50.0	"	"	"	"	"
Acetone	U			312	"	"	"	"	"
Carbon disulfide	U			50.0	"	"	"	"	"
Methylene chloride	U			50.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			50.0	"	"	"	"	"
1,1-Dichloroethane	U			50.0	"	"	"	"	"
2,2-Dichloropropane	U			50.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			50.0	"	"	"	"	"
2-Butanone	U			312	"	"	"	"	"
Bromochloromethane	U			50.0	"	"	"	"	"
Chloroform	U			50.0	"	"	"	"	"
1,1,1-Trichloroethane	U			50.0	"	"	"	"	"
Carbon tetrachloride	U			50.0	"	"	"	"	"
1,1-Dichloropropene	U			50.0	"	"	"	"	"
Benzene	U			50.0	"	"	"	"	"
1,2-Dichloroethane	U			50.0	"	"	"	"	"
Trichloroethene	U			50.0	"	"	"	"	"
1,2-Dichloropropane	U			50.0	"	"	"	"	"
Dibromomethane	U			50.0	"	"	"	"	"
Bromodichloromethane	U			50.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			50.0	"	"	"	"	"
4-Methyl-2-pentanone	U			125	"	"	"	"	"
trans-1,3-Dichloropropene	U			50.0	"	"	"	"	"
1,1,2-Trichloroethane	U	· · · · · · · · · · · · · · · · · · ·		50.0	"	"	"	"	"
Tetrachloroethene	U			50.0	"	"	"	"	"
1,3-Dichloropropane	U			50.0	"	"	"	"	"
2-Hexanone	U			125	"	"	"	"	"
Dibromochloromethane	U	·		50.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			50.0	"	"	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-200304 (2003006-06RE2) Matrix: Water Sampled: Mar-04-20 15:20 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Chlorobenzene	U			50.0	ug/L	25	B20D016	Mar-10-20	Mar-11-20
1,1,1,2-Tetrachloroethane	U			50.0	"	"	"	"	"
Ethylbenzene	260			50.0	"	"	"	"	"
m+p-Xylene	414			100	"	"	"	"	"
o-Xylene	U			50.0	"	"	"	"	"
Styrene	U			50.0	"	"	"	"	"
Bromoform	U			50.0	"	"	"	"	"
Isopropylbenzene	U			50.0	"	"	"	"	"
Bromobenzene	U			50.0	"	"	"	"	"
1,2,3-Trichloropropane	U			50.0	"	"	"	"	"
n-Propylbenzene	U			50.0	"	"	"	"	"
2-Chlorotoluene	U			50.0	"	"	"	"	"
1,3,5-Trimethylbenzene	U			50.0	"	"	"	"	"
1-Chlorotoluene	U			50.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			50.0	"	"	"	"	"
tert-Butylbenzene	U			50.0	"	"	"	"	"
1,2,4-Trimethylbenzene	U			50.0	"	"	"	"	"
sec-Butylbenzene	U			50.0	"	"	"	"	"
1,3-Dichlorobenzene	U			50.0	"	"	"	"	"
p-Isopropyltoluene	U			50.0	"	"	"	"	"
1,4-Dichlorobenzene	U			50.0	"	"	"	"	"
1,2-Dichlorobenzene	U			50.0	"	"	"	"	"
n-Butylbenzene	U			50.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			50.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			50.0	"	"	"	"	"
Hexachlorobutadiene	U			50.0	"	"	"	"	"
Naphthalene	U			50.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			50.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.57			95.2%		73-124	"	"	"
1,2-Dichloroethane-d4	11.2			111%		84-122	"	"	"
Toluene-d8	9.86			98.6%		88-108	"	"	"
4-Bromofluorobenzene	9.19			91.9%		84-108	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004B-200303 (2003006-07RE2) Matrix: Water Sampled: Mar-03-20 16:05 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting	II'	Dilution	Batch	Prepared	Analyzed
		Quanners	MDL	Limit	Units				-
Dichlorodifluoromethane	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U	(LCS), J		2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	5.86			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	5.29			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	ıı .	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004B-200303 (2003006-07RE2) Matrix: Water Sampled: Mar-03-20 16:05 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting	TT 1:	Dilution	Batch	Prepared	Analyzed
,		Quantiters	WIDL	Limit	Units			•	
1,2-Dibromoethane (EDB)	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chlorobenzene	U			2.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	n .	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC	Batch	Prepared	Analyzed
Dibromofluoromethane	10.3			102%		73-124	"	"	"
1,2-Dichloroethane-d4	11.4			113%		84-122	"	"	"
Toluene-d8	9.83			98.3%		88-108	"	"	"
4-Bromofluorobenzene	8.72			87.2%		84-108	"	"	"
4-Бготојиоговепгепе	0.72			0/.270		04-100			



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW005-200303 (2003006-08RE2) Matrix: Water Sampled: Mar-03-20 13:40 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting	TT *-	Dilution	Batch	Dranged	Analyzed
		Quantiers	MDL	Limit	Units			Prepared	
Dichlorodifluoromethane	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U	(LCS), J		2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
<b>Trichlorofluoromethane</b>	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U	(MS), L		2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	3.77			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	2.92			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	n .	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	n .	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	n n	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	n n	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"



#### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW005-200303 (2003006-08RE2) Matrix: Water Sampled: Mar-03-20 13:40 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2-Dibromoethane (EDB)	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chlorobenzene	U			2.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.2			101%		73-124	"	"	"
1,2-Dichloroethane-d4	11.5			114%		84-122	"	"	"
Toluene-d8	9.56			95.6%		88-108	"	"	"
4-Bromofluorobenzene	8.61			86.1%		84-108	"	"	"



### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-200303 (2003006-09RE2) Matrix: Water Sampled: Mar-03-20 11:00 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U	(LCS), J		2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	2.62			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U	·		5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"



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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-200303 (2003006-09RE2) Matrix: Water Sampled: Mar-03-20 11:00 Received: Mar-05-20 14:45

Sample Qualifiers: (LCS), J

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2-Dibromoethane (EDB)	U			2.00	ug/L	1	B20D016	Mar-10-20	Mar-11-20
Chlorobenzene	U			2.00	"	n .	II .	"	"
1,1,1,2-Tetrachloroethane	U			2.00	"	n .	II .	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.85			98.0%		73-124	"	"	"
1,2-Dichloroethane-d4	11.1			110%		84-122	"	"	"
Toluene-d8	9.35			93.5%		88-108	"	"	"
4-Bromofluorobenzene	8.88			88.8%		84-108	"	"	"



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200304 (2003006-10) Matrix: Water Sampled: Mar-04-20 11:20 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethylbenzene	959			100	ug/L	50	B20C012	Mar-06-20	Mar-09-20
m+p-Xylene	3050			200	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.9			109%		73-124	"	"	"
1,2-Dichloroethane-d4	11.0			110%		84-122	"	"	"
Toluene-d8	10.3			103%		88-108	"	"	"
4-Bromofluorobenzene	9.67			96.7%		84-108	"	"	"

A11-MW007-200304 (2003006-10RE1)		Mati	Matrix: Water		Sampled: Mar-04-20 11:20			Received: Mar-05-20 14:45		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Dichlorodifluoromethane	U			4.00	ug/L	2	B20C019	Mar-10-20	Mar-11-20	
Chloromethane	U			4.00	"	"	"	"	"	
Vinyl chloride	U			4.00	"	"	"	"	"	
Bromomethane	U			4.00	"	"	"	"	"	
Chloroethane	U			4.00	"	"	"	"	"	
Trichlorofluoromethane	U			4.00	"	"	"	"	"	
1,1-Dichloroethene	U			4.00	"	"	"	"	"	
Acetone	U			25.0	"	"	"	"	"	
Carbon disulfide	U			4.00	"	"	"	"	"	
Methylene chloride	U			4.00	"	"	"	"	"	
trans-1,2-Dichloroethene	U			4.00	"	"	"	"	"	
1,1-Dichloroethane	U			4.00	"	"	"	"	"	
2,2-Dichloropropane	U	(LCS), J		4.00	"	"	"	"	"	
cis-1,2-Dichloroethene	U			4.00	"	"	"	"	"	
2-Butanone	U			25.0	"	"	"	"	"	
Bromochloromethane	U			4.00	"	"	"	"	"	
Chloroform	U			4.00	"	"	"	"	"	
1,1,1-Trichloroethane	U			4.00	"	"	"	"	"	
Carbon tetrachloride	U			4.00	"	"	"	"	"	
1,1-Dichloropropene	U			4.00	"	"	"	"	"	
Benzene	U			4.00	"	"	"	"	"	
1,2-Dichloroethane	U			4.00	"	"	"	"	"	
Trichloroethene	U			4.00	"	"	"	"	"	
1,2-Dichloropropane	U			4.00	"	n .	"	"	"	
Dibromomethane	U			4.00	"	"	"	"	"	



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200304 (2003006-10RE1) Matrix: Water Sampled: Mar-04-20 11:20 Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromodichloromethane	U			4.00	ug/L	2	B20C019	Mar-10-20	Mar-11-20
cis-1,3-Dichloropropene	U			4.00	"	"	"	"	"
4-Methyl-2-pentanone	U			10.0	"	"	"	"	"
Toluene	U			4.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			4.00	"	"	"	"	"
1,1,2-Trichloroethane	U			4.00	"	"	"	"	"
Tetrachloroethene	U			4.00	"	"	"	"	"
1,3-Dichloropropane	U			4.00	"	"	"	"	"
2-Hexanone	U			10.0	"	"	"	"	"
Dibromochloromethane	U			4.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			4.00	"	"	"	"	"
Chlorobenzene	U			4.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			4.00	"	"	"	"	"
o-Xylene	U			4.00	"	"	"	"	"
Styrene	U			4.00	"	"	"	"	"
Bromoform	U			4.00	"	"	"	"	"
Isopropylbenzene	12.0			4.00	"	"	II .	"	"
Bromobenzene	U			4.00	"	"	"	"	"
1,2,3-Trichloropropane	U			4.00	"	"	"	"	"
n-Propylbenzene	6.68			4.00	"	"	"	"	"
2-Chlorotoluene	U			4.00	"	"	"	"	"
1,3,5-Trimethylbenzene	4.84			4.00	"	"	"	"	"
4-Chlorotoluene	U			4.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			4.00	"	"	"	"	"
tert-Butylbenzene	U			4.00	"	"	II .	"	"
1,2,4-Trimethylbenzene	22.6			4.00	"	"	"	"	"
sec-Butylbenzene	U			4.00	"	"	"	"	"
1,3-Dichlorobenzene	U			4.00	"	"	"	"	"
p-Isopropyltoluene	U			4.00	"	"	"	"	"
1,4-Dichlorobenzene	U			4.00	"	"	"	"	"
1,2-Dichlorobenzene	U			4.00	"	"	"	"	"
n-Butylbenzene	U			4.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			4.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			4.00	"	"	"	"	"
Hexachlorobutadiene	U			4.00	"	"	"	"	"
Naphthalene	U			4.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			4.00	"	"	"	"	"



4-Bromofluorobenzene

### **Environmental Protection Agency Region 5**

### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

10.6

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200304 (2003006-10RE1) Matrix: Water Sampled: Mar-04-20 11:20 Received: Mar-05-20 14:45 Flags / Reporting Analyte Qualifiers MDL Result Dilution Batch Prepared Analyzed Limit Units

%REC Analyzed %REC Surrogate Result Batch Prepared Limits Dibromofluoromethane 9.74 96.8% 73-124 B20C019 Mar-10-20 Mar-11-20 1,2-Dichloroethane-d4 10.7 106% 84-122 Toluene-d8 9.63 96.3% 88-108

106%

84-108

A11-MW007-200304-D (2003006-11) Matrix: Water Sampled: Mar-04-20 11:20 Received: Mar-05-20 14:45

,	,								
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethylbenzene	863			100	ug/L	50	B20C012	Mar-06-20	Mar-09-20
m+p-Xylene	2800			200	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.7			106%		73-124	"	"	"
1,2-Dichloroethane-d4	11.1			110%		84-122	"	"	"
Toluene-d8	10.4			104%		88-108	"	"	"
4-Bromofluorobenzene	9.80			98.0%		84-108	"	"	"

A11-MW007-200304-D (2003006-11RE1)	Matrix: Water	Sampled: Mar-04-20 11:20	Received: Mar-05-20 14:45

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			4.00	ug/L	2	B20C019	Mar-10-20	Mar-10-20
Chloromethane	U			4.00	"	"	"	"	"
Vinyl chloride	U			4.00	"	"	"	"	"
Bromomethane	U			4.00	"	"	"	"	"
Chloroethane	U			4.00	"	"	"	"	"
Trichlorofluoromethane	U			4.00	"	"	"	"	"
1,1-Dichloroethene	U			4.00	"	"	"	"	"
Acetone	U			25.0	"	"	"	"	"
Carbon disulfide	U			4.00	"	"	"	"	"
Methylene chloride	U			4.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			4.00	"	"	"	"	"
1,1-Dichloroethane	U			4.00	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		4.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			4.00	"	"	"	"	"
2-Butanone	U			25.0	"	"	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734

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1,2,3-Trichloropropane n-Propylbenzene

1,3,5-Trimethylbenzene 4-Chlorotoluene

1,1,2,2-Tetrachloroethane

1,2,4-Trimethylbenzene

2-Chlorotoluene

tert-Butylbenzene

sec-Butylbenzene

A11-MW007-200304-D (2003006-11RE1)

### **Environmental Protection Agency Region 5**

### US EPA Region 5 LSASD Analytical Services Branch

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

Flags /

U

6.03

U

4.57

U

U

U

21.0

U

77 West Jackson Boulevard Project Number: ILD981000417 Reported: Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

### Volatiles by GC/MS, EPA 8260C (modified) **US EPA Region 5 LSASD Analytical Services Branch**

Reporting

Sampled: Mar-04-20 11:20

Received: Mar-05-20 14:45

Matrix: Water

Analyte	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromochloromethane	U			4.00	ug/L	2	B20C019	Mar-10-20	Mar-10-20
Chloroform	U			4.00	"	"	"	"	"
1,1,1-Trichloroethane	U			4.00	"	"	"	"	"
Carbon tetrachloride	U			4.00	"	"	"	"	"
1,1-Dichloropropene	U			4.00	"	"	"	"	"
Benzene	U			4.00	"	"	"	"	"
1,2-Dichloroethane	U			4.00	"	"	"	"	"
Trichloroethene	U			4.00	"	"	"	"	"
1,2-Dichloropropane	U			4.00	"	"	"	"	"
Dibromomethane	U			4.00	"	"	"	"	"
Bromodichloromethane	U			4.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			4.00	"	"	"	"	"
4-Methyl-2-pentanone	U			10.0	"	"	"	"	"
<b>Foluene</b>	U			4.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			4.00	"	"	"	"	"
1,1,2-Trichloroethane	U			4.00	"	"	"	"	"
Tetrachloroethene	U			4.00	"	"	"	"	"
1,3-Dichloropropane	U			4.00	"	"	"	"	"
2-Hexanone	U			10.0	"	"	"	"	"
Dibromochloromethane	U			4.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			4.00	"	"	"	"	"
Chlorobenzene	U			4.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			4.00	"	"	"	"	"
o-Xylene	U			4.00	"	"	"	"	"
Styrene	U			4.00	"	"	"	"	"
Bromoform	U			4.00	"	"	"	"	"
sopropylbenzene	11.0			4.00	"	"	"	"	"
Bromobenzene	U			4.00	"	"	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734

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### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200304-D (2003006-11RE1)		Matrix: Water		r San	Sampled: Mar-04-20 11:20			Received: Mar-05-20 14:45		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
1,3-Dichlorobenzene	U			4.00	ug/L	2	B20C019	Mar-10-20	Mar-10-20	
p-Isopropyltoluene	U			4.00	"	"	"	"	"	
1,4-Dichlorobenzene	U			4.00	"	"	"	"	"	
1,2-Dichlorobenzene	U			4.00	"	"	"	"	"	
n-Butylbenzene	U			4.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	U			4.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	U			4.00	"	"	"	"	"	
Hexachlorobutadiene	U			4.00	"	"	"	"	"	
Naphthalene	U			4.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	U			4.00	"	II .	"	"	"	
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed	
Dibromofluoromethane	10.2			101%		73-124	"	"	"	
1,2-Dichloroethane-d4	10.9			109%		84-122	"	"	"	
Toluene-d8	9.90			99.0%		88-108	"	"	"	
4-Bromofluorobenzene	10.7			107%		84-108	"	"	"	

	Matrix: Water		Sampled: Mar-03-20 08:00			Received: Mar-05-20 14:45		
Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			12.5	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
2.33			2.00	"	"	"	"	"
U			12.5	"	"	"	"	"
U			2.00	"	"	"	"	"
U			2.00	"	"	"	"	"
	U U U U U U U U U U U U U U U U U U U	Result Qualifiers  U U U U U U U U U U U U U U U U U U	Result Qualifiers MDL  U  U  U  U  U  U  U  U  U  U  U  U  U	Result         Flags / Qualifiers         MDL         Reporting Limit           U         2.00           U         12.5           U         12.5           U         2.00	Result   Page / Qualifiers   MDL   Reporting Limit   Units     U	Result   Flags / Qualifiers   MDL   Reporting Limit   Units   Dilution     U	Result   Flags / Qualifiers   MDL   Reporting Limit   Units   Dilution   Batch	Result         Flags / Qualifiers         MDL Limit Limit         Units         Dilution         Batch         Prepared           U         2.00         ug/L         1         B20C012         Mar-06-20           U         2.00         "         "         "         "           U         2.00         "         "         "         "         "           U         2.00         "         "         "         "         "         "

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734

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### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Carbon tetrachloride         U         200         C	A11-TB001-200303 (2003006-12)		Matrix: Water		Sampled: M	ar-03-20 0	8:00 Re	0 Received: Mar-05-20 14:45		
Carbon tetrachloride         U         2.00         "	Analyte	Result	_	MDL			Dilution	Batch	Prepared	Analyzed
	1,1,1-Trichloroethane	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
	Carbon tetrachloride	U			2.00	"	"	"	"	"
1.2-Dichloroethane	1,1-Dichloropropene	U			2.00	"	"	"	"	"
	Benzene	U			2.00	"	"	"	"	"
	1,2-Dichloroethane	U			2.00	"	"	"	"	"
	Trichloroethene	U			2.00	"	"	"	"	"
Promoticinate   Promoticinat	1,2-Dichloropropane	U			2.00	"	"	"	"	"
Second Control Contr	Dibromomethane	U			2.00	"	"	"	"	"
Methyl-2-pentainne   U	Bromodichloromethane	U			2.00	"	"	"	"	"
Tollane	cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
Toluene         U         2.00         "	4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Title   Titl	Toluene	U			2.00	"	"	"	"	"
Tetrachloroethene	trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,3-Dichloropropane   U	1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
1,2-Pictonophipping   V	Tetrachloroethene	U			2.00	"	"	"	"	"
Description of the company of the	1,3-Dichloropropane	U			2.00	"	"	"	n .	"
1,2-Dibromoethane (EDB)   U   2,00	2-Hexanone	U			5.00	"	"	"	"	"
Chlorobenzene   U	Dibromochloromethane	U			2.00	"	"	"	n .	"
1,1,1,2-Tetrachloroethane	1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Ethylbenzene U 2.00 " " " " " " " " " " " " " " " " " "	Chlorobenzene	U			2.00	"	"	"	n n	"
Heart   Hear	1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	n .	"
O-Xylene U 2.00 " " " " " " " " " " " " " " " " " "	Ethylbenzene	U			2.00	"	"	"	"	"
Styrene   U   2.00   "   "   "   "   "   "   "	m+p-Xylene	U			4.00	"	"	"	n n	"
Bromoform   U   2.00   "   "   "   "   "   "   "	o-Xylene	U			2.00	"	"	"	n .	"
Isopropylbenzene	Styrene	U			2.00	"	"	"	"	"
State   Stat	Bromoform	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane       U       2.00       "<	Isopropylbenzene	U			2.00	"	"	"	n n	"
n-Propylbenzene U 2.00 " " " " " " " " " " " " " " " " " "	Bromobenzene	U			2.00	"	"	"	"	"
Description	1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
2-Chlorotoluene         U         2.00         "	n-Propylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene U 2.00 " " " " " " " " " " " 1,1,2,2-Tetrachloroethane U 2.00 " " " " " " " " " " " " " " 1,2,4-Trimethylbenzene U 2.00 " " " " " " " " " " " " " " " " " "	2-Chlorotoluene	U			2.00	"	"	"	"	"
4-Chlorotoluene U 2.00 " " " " " " " " " 1,1,2,2-Tetrachloroethane U 2.00 " " " " " " " " " " " " " " " 1,2,4-Trimethylbenzene U 2.00 " " " " " " " " " " " " " " " " " "	1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane       U       2.00       " <td< td=""><td>4-Chlorotoluene</td><td>U</td><td></td><td></td><td>2.00</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td></td<>	4-Chlorotoluene	U			2.00	"	"	"	"	"
tert-Butylbenzene U 2.00 " " " " " " " " 1,2,4-Trimethylbenzene U 2.00 " " " " " " " " "	1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene U 2.00 " " " " " "	tert-Butylbenzene	U			2.00	"	"	"	II .	"
·	· · · · · · · · · · · · · · · · · · ·	U			2.00	"	"	"	"	"
	sec-Butylbenzene					"	"	"	n n	"



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Apr-20-20 17:34

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB001-200303 (2003006-12)		Matrix: W	ater	Sampled: M	ar-03-20 0	8:00 Re	ceived: Mar	-05-20 14:45	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,3-Dichlorobenzene	U			2.00	ug/L	1	B20C012	Mar-06-20	Mar-09-20
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.7			106%		73-124	"	"	"
1,2-Dichloroethane-d4	10.5			104%		84-122	"	"	"
Toluene-d8	10.4			104%		88-108	"	"	"
4-Bromofluorobenzene	9.22			92.2%		84-108	"	"	"

Report Name: 2003006 VOA - 8260 FINAL Apr 20 20 1734

42 of 2009 (Full Package)

### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

		Data V	alidation Report				
Sample Delivery Group	(SDG) Number:	20030	0087				
Laboratory:	(ODO) Number.	STAT Analysis Corpo		t America			
Luboratory.		OTAT Attalysis Corpor	ration / Earonns 100	t 7 tillolloa	ı		
Matrix:		Groundwater					
Collection date:		03/03/20					
Analysis/Methods:		Wat Chamietry					
		Wet Chemistry:	Anions 300.0				
			Alkalinity M2320 B				
		Dissolved Gases - Me	,				
Samples in SDG:							
<u>Lab ID</u>	Sample Number						
20030087-01	A11-MW001-200303						
20030087-02 20030087-03	A11-MW005-200303 A11-MW006-200303						
20030087-03	A11-MW004B-200303						
20000001 01	7111 WITTOO 1B 200000						
	performed in accordance with v (EPA January 2017), Nation						
		Wet Che	mistry Parameters				
Precision:							Yes No N/A
	ative percent differences (RPI						N/A
	uplicate RPDs ≤ 20%? (Or lab						Yes
Laboratory Control Spike Laboratory Duplicate RPI	Duplicates RPD within limits?	•					Yes N/A
Comments (note deviatio							IV/A
	<i>-</i> -						
Field		Sample	<u>Duplicate</u>	%RPD	Qualifiers	Associated Samples	
Duplicates							
N/A							
MS/MSD		<u>%RPD</u>	<u>Limit</u>		<u>Qualifiers</u>	Associated Samples	
Nitrogen, Nitrate 20030087-001BMS/B	Med	Acceptable	20%				
(20030087-01)	JIVIOD	Acceptable	2070				
(2000001 01)							
Sulfate							
20030087-001BMS/B	BMSD	Acceptable	20%				
(20030087-01)							
Alkalinity			000/				
20030087-001BMS/B	BMSD	Acceptable	20%				
LCS/LCSD		<u>%RPD</u>	<u>Limits</u>		<u>Qualifiers</u>	Associated Samples	
N/A							
Laboratory Duplicat	e	%RPD	<u>Limits</u>		Qualifiers	Associated Samples	
N/A							
Accuracy:		10 /1					Yes No N/A
-	trix Spike Duplicate criteria me	et? (frequency ≥ 5% and	iaporatory determin	ied control limi	is)		Yes Yes
Laboratory Control Samp Were the Laboratory Met	ie criteria met? hod Blank results all < RL?						res No
Were the Field Blanks res							N/A
Was the ICAL criteria me							Yes
Was the CCV criteria met	t?						Yes
Was the Tuning criteria m							N/A
	coveries within laboratory det	ermined control limits?					N/A
Were the Internal Standa	rd areas within ± 50 - 150%?						N/A

Comments (note deviations):

Blanks Nitrogen, Nitrate		Concentration	MDL /PQL		Qualifiers	Associated Samples
ICMBW1 030720	Nitrogen	0.048 J	0.2		None	Sample results > RL
Sulfate ICMBW1 030720	Sulfate	0.395 J	4.0		None	Sample results > RL
Alkalinity ALKMBW1 030720		Nondetect				
ICB/CCB ICB ICB	Nitrogen, Nitrate Sulfate	Concentration 0.05 0.363	MDL / PQL 0.2 4.0		Qualifiers None None	Associated Samples Sample results > RL Sample results > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.05 0.379	0.2 4.0		None None	Sample results > RL Sample results > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.051 0.381	0.2 4.0		None None	Sample results > RL Sample results > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.054 0.365	0.2 4.0		None None	Sample results > RL Sample results > RL
Field Blank N/A		Concentration	MDL / PQL		Qualifiers	Associated Samples
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	<u>Associated Samples</u>
MS/MSD Nitrogen, Nitrate		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples
20030087-001BMS/BM (20030087-01)	SD	Acceptable	90-110			
Sulfate 20030087-001BMS/BM (20030087-01)	SD	Acceptable	90-110			
Alkalinity 17030290-003BMS/MS	D	Acceptable	75-125			
LCS/LCSD Nitrogen, Nitrate		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples
ICLCSW1 030720		Acceptable	90-110			
Sulfate ICLCSW1 030720		Acceptable	90-110			
Alkalinity ALKLCSW1 030720		Acceptable	90-110			
ICV March 7 - 21:45	Nitrogen, Nitrate Sulfate		<u>%R</u> Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples
<b>CCV</b> March 7 - 21:32	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples
March 8 - 00:23	Nitrogen, Nitrate Sulfate		Acceptable Acceptable			

Tune N/A

Internal Standards
N/A

Area Lower / Upper
Limit
Qualifiers
Associated Samples

Methane (RSK-175) Precision: Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Laboratory Control Spike Duplicates RPD within limits?
Laboratory Duplicate RPDs within limits? Comments (note deviations): Field <u>Sample</u> **Duplicate** %RPD **Duplicates** N/A MS/MSD %RPD <u>Limit</u> Methane 608-181174-1 MS/MSD Acceptable

Yes No N/A N/A Yes Yes N/A

Qualifiers Associated Samples

**Qualifiers** Associated Samples

LCS/LCSD Methane	%RPD	<u>Limits</u>	Qualifiers	Associated Samples			
LCS 680-610346 / 3 / 4	Acceptable						
LCS 680-611124 / 6 / 7	Acceptable						
Laboratory Duplicate N/A	<u>%RPD</u>	<u>Limits</u>	Qualifiers	Associated Samples			
Accuracy:  Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)  Laboratory Control Sample criteria met?  Were the Laboratory Method Blank results all < RL?  Were the Field Blanks results all < RL?  Was the ICAL criteria met?  Was the CCV criteria met?  Was the Tuning criteria met?  Were the Surrogate % recoveries within laboratory determined control limits?  Were the Internal Standard areas within ± 50 - 150%?  Comments (note deviations):							
Blanks Methane MB 680-610346 / 8 MB 680-611124 / 8	Concentration (mg/L) Nondetect Nondetect	MDL /PQL	<u>Qualifiers</u>	Associated Samples			
Field Blank N/A	Concentration	MDL / PQL	Qualifiers	Associated Samples			
Surrogates N/A	<u>%R</u>	<u>Limit</u>	Qualifiers	Associated Samples			
MS/MSD Methane 608-181174-1 MS/MSD	<u>%R</u> Acceptable	<u>Limits (%)</u>	Qualifiers	Associated Samples			
LCS/LCSD  Methane  LCS 680-610346 / 3 / 4  LCS 680-611124 / 6 / 7	%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples			
200 000 0111217 071							

CCV 3/10/2020 15:13 3/10/2020 19:01		RRF Acceptable Acceptable	<u>%D</u> Acceptable Acceptable	<u>Limits</u>	<u>Qualifiers</u>	<u>Associated Samples</u>	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures and desi Were holding times met? Was preservation criteria met? (0° C Were Chain-of-Custody records com Comments (note deviations): The c	C - 6° C) nplete and provided						Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures and met Comments (note deviations):	thods followed as de	efined in the QAPP or	field change document	ation?			Yes No N/A Yes
Completeness (90%): Are all data in this SDG usable? Comments (note deviations):							Yes No N/A Yes
Sensitivity: Are MDLs present and reported? Do the reporting limits meet project Comments (note deviations):  Comment:	requirements?						Yes No N/A Yes Yes
Data is usable as reported.  Data Validator:	Kristine P	Molloy	Date:	12/5/2020			

Date: 12/8/2021

Cherie Zakowski

Data Reviewer:

### **STAT Analysis Corporation**

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported:	March 30, 2020
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**Date Printed:** March 30, 2020

**ANALYTICAL RESULTS** 

Matrix: Aqueous

**Client:** CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Semi Annual GW Sampli **Work Order:** 20030087 Revision 0

**Lab ID:** 20030087-001 **Collection Date:** 3/3/2020 9:20:00 AM

Client Sample ID A11-MW001-200303

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0	)		Prep	Date: 3/7/2020	Analyst: <b>MD</b>
Nitrogen, Nitrate (As N)	3.5	0.20	*	mg/L	1	3/7/2020
Sulfate	45	4.0	*	mg/L	1	3/7/2020
Alkalinity	M2320	В		Prep	Date: 3/7/2020	Analyst: MD
Alkalinity, Total (As CaCO3)	360	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSKSO	OP-175		Prep	Date:	Analyst: SUB
Methane	ND	0.00058		mg/L	1	3/10/2020

**Lab ID:** 20030087-002 **Collection Date:** 3/3/2020 1:40:00 PM

Client Sample ID A11-MW005-200303 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	.0		Prep	o Date: <b>3/7/2020</b>	Analyst: <b>MD</b>
Nitrogen, Nitrate (As N)	2.5	0.20	*	mg/L	1	3/7/2020
Sulfate	31	4.0	*	mg/L	1	3/7/2020
Alkalinity	M232	20 B		Prep	Date: <b>3/7/2020</b>	Analyst: MD
Alkalinity, Total (As CaCO3)	320	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSK	SOP-175		Prep	Date:	Analyst: SUB
Methane	ND	0.00058		mg/L	1	3/10/2020

**Lab ID:** 20030087-003 **Collection Date:** 3/3/2020 11:00:00 AM

Client Sample ID A11-MW006-200303 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0	)		Prep	Date: <b>3/7/2020</b>	Analyst: <b>MD</b>
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	3/7/2020
Sulfate	35	4.0	*	mg/L	1	3/7/2020
Alkalinity	M2320	) B		Prep	Date: <b>3/7/2020</b>	Analyst: MD
Alkalinity, Total (As CaCO3)	490	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSKS	OP-175		Prep	Date:	Analyst: SUB
Methane	3.3	0.39		mg/L	1	3/16/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded



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**Date Reported:** March 30, 2020

March 30, 2020

**ANALYTICAL RESULTS** 

**Client:** CDM Smith Inc.

**Date Printed:** 

**Project:** 239446, SE Rockford Area 11 Semi Annual GW Sampli Work Order: 20030087 Revision 0

**Lab ID:** 20030087-004 **Collection Date:** 3/3/2020 4:05:00 PM

Client Sample ID A11-MW004B-200303 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	.0		Prep	Date: <b>3/7/202</b> 0	Analyst: MD
Nitrogen, Nitrate (As N)	1.1	0.20	*	mg/L	1	3/7/2020
Sulfate	19	4.0	*	mg/L	1	3/7/2020
Alkalinity	M232	20 B		Prep	Date: 3/7/2020	Analyst: MD
Alkalinity, Total (As CaCO3)	330	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSKS	SOP-175		Prep	Date:	Analyst: SUB
Methane	ND	0.00058		mg/L	1	3/10/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

		Data	Validation Report				
Sample Delivery Group	(SDG) Number:	2003	30133				
Laboratory:	(ODO) Hambon		oration / Eurofins Tes	<del>-</del> st America			
		<u> </u>			•		
Matrix:		Groundwater					
Collection date: Analysis/Methods:		03/04/20					
Analysis/Methods.		Wet Chemistry:					
		,	Anions 300.0				
			Alkalinity M2320 B				
0		Dissolved Gases - M	lethane - RSK-175				
Samples in SDG: Lab ID	Sample Number						
20030133-001	A11-MW003-200304						
20030133-002	A11-MW002-200304						
20030133-003	A11-MW007-200304						
20030133-004 20030133-005	A11-MW004A-200304 A11-MW004A-200304-D	1					
20000100 000	7111 MW 00 171 20000 1 B						
•	erformed in accordance with t v (EPA January 2017), and the						
		Wet Ch	emistry Parameters				
		<u></u>		•			
Precision:	ativa naraant differences (DDD	) <200/ (aguagua)2					Yes No N/A Yes
	ative percent differences (RPD ıplicate RPDs  ≤ 20%? (Or lab						Yes
	Duplicates RPD within limits?	<u> </u>					N/A
Laboratory Duplicate RPD							N/A
Comments (note deviation	<u>ns)</u> :						
Field		<u>Sample</u> A11-MW004A-	<u>Duplicate</u> A11-MW004A-	<u>%RPD</u>	<u>Qualifiers</u>	Associated Samples	
Duplicates		200304	200304-D				
				Acceptable			
MS/MSD		%RPD	<u>Limit</u>		Qualifiers	Associated Samples	
Nitrogen, Nitrate							
20030087-001BMS/B	MSD	Acceptable	20%				
Sulfate							
20030087-001BMS/B	MSD	Acceptable	20%				
20000001 00120/2		, 1000p1ab10	2070				
Alkalinity							
20030087-001BMS/B	MSD	Acceptable	20%				
LCS/LCSD		%RPD	<u>Limits</u>		Qualifiers	Associated Samples	
N/A							
Laboratory Duplicate	e	%RPD	<u>Limits</u>		Qualifiers	Associated Samples	
N/A							
Accuracy:							Yes No N/A
	trix Spike Duplicate criteria me	et? (frequency ≥ 5% an	d laboratory determin	ned control limi	ts)		Yes
Laboratory Control Sample Were the Laboratory Method	le criteria met? hod Blank results all < RL?						Yes No
Were the Field Blanks res							N/A
Was the ICAL criteria met	t?						Yes
Was the CCV criteria met							Yes
Was the Tuning criteria m	net? coveries within laboratory dete	armined control limits?					N/A N/A
	rd areas within ± 50 - 150%?	amaneu control minis?					N/A N/A
Comments (note deviation							•

Blanks Nitrogen, Nitrate		Concentration	MDL /PQL	;	<u>Qualifiers</u>	<u>Associated Samples</u>
ICMBW1 030720	Nitrogen	0.048 J	0.2		None	Sample results > RL
Sulfate ICMBW1 030720	Sulfate	0.395 J	4.0		None	Sample results > RL
Alkalinity ALKMBW1 030720		Nondetect				
JOD/OOD		0	MDI / DOI		0	A
ICB/CCB ICB	Nitrogen, Nitrate	Concentration 0.05	MDL / PQL 0.2		Qualifiers None	Associated Samples Sample results > RL
ICB	Sulfate	0.363	4.0		None	Sample results > RL
ССВ	Nitrogen, Nitrate	0.05	0.2		None	Sample results > RL
CCB	Sulfate	0.379	4.0		None	Sample results > RL
ССВ	Nitrogen, Nitrate	0.051	0.2		None	Sample results > RL
CCB	Sulfate	0.381	4.0		None	Sample results > RL
ССВ	Nitrogon Nitroto	0.05	0.2		None	Sample results > RL
CCB	Nitrogen, Nitrate Sulfate	0.359	4.0		None	Sample results > RL
						·
Field Blank N/A		<u>Concentration</u>	MDL / PQL	!	<u>Qualifiers</u>	Associated Samples
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples
MS/MSD		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples
Nitrogen, Nitrate 20030087-001BMS/B	BMSD	Acceptable	90-110			
Sulfate						
20030087-001BMS/B	BMSD	Acceptable	90-110			
Alkalinity 20030087-001BMS/B	BMSD	Acceptable	75-125			
LCS/LCSD		<u>%R</u>	<u>Limits</u>		<u>Qualifiers</u>	Associated Samples
Nitrogen, Nitrate ICLCSW1 030720		Acceptable	90-110			
Sulfate						
ICLCSW1 030720		Acceptable	90-110			
Alkalinity ALKLCSW1 030720		Acceptable	80-120			
ICV			<u>%R</u>	Limits	Qualifiers	Associated Samples
March 7 - 21:45	Nitrogen, Nitrate Sulfate		Acceptable Acceptable			
ccv			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples
March 7 - 21:32	Nitrogen, Nitrate Sulfate		Acceptable Acceptable			
March 8 - 00:23	Nitrogen, Nitrate Sulfate		Acceptable Acceptable			
March 8 - 04:02	Nitrogen, Nitrate		Acceptable Acceptable			

Tune N/A

Internal Standards
N/A

Area Lower / Upper
Limit
Qualifiers
Associated Samples

Methane (RSK-175) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Laboratory Control Spike Duplicates RPD within limits? Laboratory Duplicate RPDs within limits? Comments (note deviations): Field %RPD **Qualifiers** Associated Samples Sample **Duplicate** A11-MW004A-A11-MW004A-**Duplicates** 200304 200304-D Acceptable MS/MSD %RPD Limit **Qualifiers** Associated Samples N/A <u>Limits</u> LCS/LCSD %RPD **Qualifiers** Associated Samples Methane LCS 680-611285/3/4 Acceptable LCS 680-611285/6/7 Acceptable %RPD **Laboratory Duplicate** Limits **Qualifiers** Associated Samples N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) Laboratory Control Sample criteria met? Were the Laboratory Method Blank results all < RL? Were the Field Blanks results all < RL? Was the ICAL criteria met? Was the CCV criteria met? Was the Tuning criteria met? Were the Surrogate % recoveries within laboratory determined control limits? Were the Internal Standard areas within ± 50 - 150%? Comments (note deviations): Concentration **Blanks** (mg/L) MDL/PQL **Qualifiers** Associated Samples Methane MB 680-611285/8 Nondetect Field Blank MDL / PQL **Qualifiers** Associated Samples Concentration N/A Surrogates <u>%R</u> **Limit Qualifiers** Associated Samples N/A

<u>%R</u>

<u>%R</u>

Acceptable

Acceptable

**RRF** 

Acceptable

Acceptable

MS/MSD

LCS/LCSD

LCS 680-611285/3/4

LCS 680-611285/6/7

2/17/2020 8:45

3/04/2020 9:12

Methane

**ICAL** 

N/A

		Ξ

**Qualifiers** Associated Samples

**Qualifiers** Associated Samples

**Qualifiers** Associated Samples

Yes

Yes

N/A

N/A

Yes

Yes

N/A

Yes

Yes

N/A

N/A

N/A

N/A

Limits (%)

**Limits** 

%RSD

Acceptable

Acceptable

<b>CCV</b> 3/17/2020 17:11		RRF Acceptable	<u>%D</u> Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
3/17/2020 17:37		Acceptable	Acceptable				
3/17/2020 20:35		Acceptable	Acceptable				
3/17/2020 8:38		Acceptable	Acceptable				
Tune N/A							
		<u>,</u>	Area Lower / Upper				
Internal Standards N/A		<u>Area</u>	<u>Limit</u>		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures and design	criteria met?						Yes No N/A Yes
Were holding times met?	Criteria met:						Yes
Was preservation criteria met? (0° C -							Yes
Were Chain-of-Custody records comple							Yes
Comments (note deviations): The cool	er temperatures	s were 1.8 and 1.4 ° C.					
Preservation		<u>Cooler</u> <u>Temperature</u>	Preservation Criteria		Qualifier	Associated Samples	
		(Degrees C) Acceptable	<u>Ontena</u>				
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		<u>Qualifier</u>	Associated Samples	
Comparability:							Yes No N/A
Were analytical procedures and metho	ds followed as	defined in the QAPP or fie	eld change documen	tation?			Yes
Comments (note deviations):							
Completeness (90%):							Yes No N/A
Are all data in this SDG usable?							Yes
Comments (note deviations):							
Sensitivity:							Yes No N/A
Are MDLs present and reported?	iva ma a m ta O						Yes
Do the reporting limits meet project recomments (note deviations):	uirements?						Yes
Comment:  Data is usable as reported.							
Data Validator:	Kristine	Molloy	Date:	1/22/2021			

Date: 1/25/2021

Cherie Zakowski

Data Reviewer:

### **STAT Analysis Corporation**

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Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported:	March 30, 2020
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**Date Printed:** March 30, 2020

**ANALYTICAL RESULTS** 

Matrix: Aqueous

**Client:** CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Semi Annual GW Sampli **Work Order:** 20030133 Revision 0

**Lab ID:** 20030133-001 **Collection Date:** 3/4/2020 9:05:00 AM

Client Sample ID A11-MW003-200304

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0	)		Prep	Date: <b>3/7/2020</b>	Analyst: MD
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	3/7/2020
Sulfate	ND	4.0	*	mg/L	1	3/7/2020
Alkalinity	M2320	В		Prep	Date: 3/7/2020	Analyst: MD
Alkalinity, Total (As CaCO3)	410	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSKS	OP-175		Prep	Date:	Analyst: SUB
Methane	12	0.39		mg/L	1	3/17/2020

**Lab ID:** 20030133-002 **Collection Date:** 3/4/2020 1:35:00 PM

Client Sample ID A11-MW002-200304 Matrix: Aqueous

Result	RL	Qualifier	Units	DF	Date Analyzed
E300.	0		Prep	Date: <b>3/7/2020</b>	Analyst: <b>MD</b>
ND	0.20	*	mg/L	1	3/8/2020
ND	4.0	*	mg/L	1	3/8/2020
M2320	) B		Pre	Date: <b>3/7/2020</b>	Analyst: MD
370	200	m	g/L CaCO	3 1	3/7/2020
RSKS	OP-175		Prep	Date:	Analyst: SUB
16	0.39		mg/L	1	3/17/2020
	E300.0 ND ND <b>M2320</b> 370 RSKS	E300.0 ND 0.20 ND 4.0  M2320 B  370 200  RSKSOP-175	E300.0  ND 0.20 *  ND 4.0 *  M2320 B  370 200 m	E300.0         Prep           ND         0.20         * mg/L           ND         4.0         * mg/L           M2320 B         Prep           370         200         mg/L CaCO           RSKSOP-175         Prep	E300.0 Prep Date: 3/7/2020  ND 0.20 * mg/L 1  ND 4.0 * mg/L 1  M2320 B Prep Date: 3/7/2020  370 200 mg/L CaCO3 1  RSKSOP-175 Prep Date:

**Lab ID:** 20030133-003 **Collection Date:** 3/4/2020 11:20:00 AM

Client Sample ID A11-MW007-200304 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.	0		Prep	Date: <b>3/7/2020</b>	Analyst: MD
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	3/8/2020
Sulfate	24	4.0	*	mg/L	1	3/8/2020
Alkalinity	M2320	0 B		Prep	Date: 3/7/2020	Analyst: MD
Alkalinity, Total (As CaCO3)	330	200	m	g/L CaCO	3 1	3/7/2020
Dissolved Gases in Water	RSKS	OP-175		Prep	Date:	Analyst: SUB
Methane	5.5	0.39		mg/L	1	3/17/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

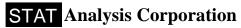
RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded



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Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

**Date Reported:** March 30, 2020

March 30, 2020

**ANALYTICAL RESULTS** 

Client: CDM Smith Inc.

**Date Printed:** 

**Project:** 239446, SE Rockford Area 11 Semi Annual GW Sampli **Work Order:** 20030133 Revision 0

**Lab ID:** 20030133-004 **Collection Date:** 3/4/2020 3:20:00 PM

Client Sample ID A11-MW004A-200304 Matrix: Aqueous

Result RL Qualifier Units DF **Analyses Date Analyzed** Anions by Ion Chromatography E300.0 Prep Date: 3/7/2020 Analyst: MD Nitrogen, Nitrate (As N) 0.20 3/8/2020 0.28 mg/L 1 3/8/2020 Sulfate mg/L 36 4.0 Prep Date: 3/7/2020 Analyst: MD **Alkalinity** M2320 B mg/L CaCO3 1 Alkalinity, Total (As CaCO3) 200 3/7/2020 330 **Dissolved Gases in Water** RSKSOP-175 Prep Date: Analyst: SUB Methane 0.51 0.00058 mg/L 3/17/2020

**Lab ID:** 20030133-005 **Collection Date:** 3/4/2020 3:20:00 PM

Client Sample ID A11-MW004A-200304-D Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E30	0.0		Pre	p Date: <b>3/7/202</b>	0 Analyst: MD
Nitrogen, Nitrate (As N)	0.38	0.20	*	mg/L	1	3/8/2020
Sulfate	36	4.0	*	mg/L	1	3/8/2020
Alkalinity	M23	20 B		Pre	p Date: <b>3/7/202</b>	0 Analyst: MD
Alkalinity, Total (As CaCO3)	320	200	m	g/L CaCC	3 1	3/7/2020
Dissolved Gases in Water	RSK	SOP-175		Pre	p Date:	Analyst: SUB
Methane	0.47	0.00058		mg/L	1	3/17/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded



### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

Sample Delivery Group (SDG) Number: E200604
Laboratory: ESAT / TechLaw

Matrix: Water

Collection date: 6/9/2020 & 6/10/2020
Analysis/Methods:

1,4-Dioxane - EPA 522 SIM

Samples in SDG:

Lab ID	Sample Number	Lab ID	Sample Number
E200604-01	A11-TB001-200609	E200604-07	A11-MW003-200610
E200604-02	A11-MW006-200609	E200604-08	A11-MW007-200610
E200604-03	A11-MW005-200609	E200604-09	A11-MW007-200610-D
E200604-04	A11-MW001-200609	E200604-10	A11-MW002-200610
E200604-05	A11-MW004B-200609	E200604-11	A11-MW004A-200610
E200604-06	A11-FB001-200609		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017).

### 1,4-Dioxane EPA 520 SIM

 Precision:
 Yes No N/A

 Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)?
 Yes

 Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)
 Yes

 Laboratory Control Spike Duplicates RPD within limits?
 Yes

 Laboratory Duplicate RPDs within limits?
 N/A

 Comments (note deviations):
 N/A

Field Duplicates	<u>Sample</u> <b>A11-MW007-200610</b> ND	<u>Duplicate</u> A11-MW007-200610-D ND	%RPD Acceptable	<u>Qualifiers</u>	Associated Samples
<b>MS/MSD</b> E20F013-MS1 / MSD1	<u>%RPD</u> Acceptable	<u>Limit</u>		Qualifiers	Associated Samples
LCS/LCSD E20F013-BS1 / BSD1	<u>%RPD</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples
Laboratory Duplicate N/A	<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples

Accuracy:	Yes No N/A
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)	Yes
Laboratory Control Sample criteria met?	Yes
Were the Laboratory Method Blank results all < RL?	Yes
MRL recoveries within criteria?	Yes
Were the Field Blanks results all < RL?	Yes
Was the ICAL criteria met?	Yes
Was the CCV criteria met?	Yes
Was the Tuning criteria met?	Yes
Were the Surrogate % recoveries within laboratory determined control limits?	Yes
Were the Internal Standard areas within ± 50 - 150%?	Yes
Comments (note deviations):	

Blanks E20F013-BLK1	Concentration (µg/L) Nondetect	MDL /RL	Qualifiers Associated Samples
Field Blank A11-TB001-200609 A11-FB001-200609	<u>Concentration</u> Nondetect Nondetect	MDL /RL	Qualifiers Associated Samples

Surrogates		<u>%R</u> Acceptable	<u>Limit</u>	Qualifiers	Associated Samples	
<b>MS/MSD</b> E20F013-MS1 / MSD1		<u>%R</u> Acceptable	Limits (%)	Qualifiers	Associated Samples	
LCS/LCSD E20F013-BS1 / BSD1		<u>%</u> R Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
MRL Check E20F013-MRL1		<u>%R</u> Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
ICAL 5/ 27 / 2020 - 13:20		RRF Acceptable	<u>%RSD</u> Acceptable	Qualifiers	Associated Samples	
ICV / CCV		RRF	<u>%D</u>	Qualifiers	Associated Samples	_
ICV		A 4 - 1-1 -	A A - b - l -			
5/ 27 / 2020 - 13:00 CCV 6/ 24 / 2020 - 10:03 6/ 24 / 2020 - 5:42		Acceptable  Acceptable  Acceptable	Acceptable  Acceptable  Acceptable			
<b>Tune</b> Acceptable						
Internal Standards		<u>Area</u> Acceptable	Area Lower / Upper Limit	Qualifiers	Associated Samples	
		Noceptable				
Representativeness: Were sampling procedures and were holding times met? Was preservation criteria met? (were Chain-of-Custody records Comments (note deviations): The	0° C - 6° C) complete and provided in	data package? 4.6 ° C. <u>Cooler Temperature</u>	Preservation Criteria	Qualifier	Associated Samples	Yes No N/A Yes Yes Yes Yes Yes
Were sampling procedures and Were holding times met? Was preservation criteria met? ( Were Chain-of-Custody records	0° C - 6° C) complete and provided in	data package? 4.6 ° C.	Preservation Criteria	Qualifier	Associated Samples	Yes Yes Yes
Were sampling procedures and Were holding times met? Was preservation criteria met? (Were Chain-of-Custody records Comments (note deviations): The	0° C - 6° C) complete and provided in	data package? 4.6 ° C.  Cooler Temperature (Degrees C)	Preservation Criteria  HT Criteria	<u>Qualifier</u> <u>Qualifier</u>	Associated Samples  Associated Samples	Yes Yes Yes
Were sampling procedures and Were holding times met? Was preservation criteria met? (I Were Chain-of-Custody records Comments (note deviations): The Preservation	0° C - 6° C) complete and provided in the cooler temperature was  Analyte  methods followed as defin	data package? 4.6 ° C.  Cooler Temperature (Degrees C) Acceptable  Days to Analysis Acceptable	HT Criteria			Yes Yes Yes
Were sampling procedures and Were holding times met? Was preservation criteria met? (Were Chain-of-Custody records Comments (note deviations): The Preservation  Holding Times  Comparability: Were analytical procedures and Comments (note deviations): Completeness (90%): Are all data in this SDG usable?	0° C - 6° C) complete and provided in the cooler temperature was  Analyte  methods followed as defin	data package? 4.6 ° C.  Cooler Temperature (Degrees C) Acceptable  Days to Analysis Acceptable	HT Criteria			Yes Yes Yes Yes Yes Yes No N/A Yes Yes No N/A
Were sampling procedures and were holding times met? Was preservation criteria met? (were Chain-of-Custody records Comments (note deviations): The Preservation  Holding Times  Comparability: Were analytical procedures and Comments (note deviations): Completeness (90%): Are all data in this SDG usable? Comments (note deviations): Sensitivity: Are MDLs present and reported? Do the reporting limits meet projections.	0° C - 6° C) complete and provided in the cooler temperature was  Analyte  methods followed as defined?	data package? 4.6 ° C.  Cooler Temperature (Degrees C) Acceptable  Days to Analysis Acceptable	HT Criteria			Yes Yes Yes Yes Yes Yes No N/A Yes Yes No N/A
Were sampling procedures and Were holding times met? Was preservation criteria met? (Were Chain-of-Custody records Comments (note deviations): The Preservation  Holding Times  Comparability: Were analytical procedures and Comments (note deviations): Completeness (90%): Are all data in this SDG usable? Comments (note deviations): Sensitivity: Are MDLs present and reported? Do the reporting limits meet projecomments (note deviations):	O° C - 6° C) complete and provided in the cooler temperature was  Analyte  methods followed as defined as defi	data package? 4.6 ° C.  Cooler Temperature (Degrees C) Acceptable  Days to Analysis Acceptable	HT Criteria			Yes Yes Yes Yes Yes Yes No N/A Yes Yes No N/A Yes
Were sampling procedures and Were holding times met? Was preservation criteria met? (Were Chain-of-Custody records Comments (note deviations): The Preservation  Holding Times  Comparability: Were analytical procedures and Comments (note deviations): Completeness (90%): Are all data in this SDG usable? Comments (note deviations): Sensitivity: Are MDLs present and reported? Do the reporting limits meet projections.	O° C - 6° C) complete and provided in the cooler temperature was  Analyte  methods followed as defined as defi	data package? 4.6 ° C.  Cooler Temperature (Degrees C) Acceptable  Days to Analysis Acceptable  ed in the QAPP or field cl	HT Criteria	Qualifier		Yes Yes Yes Yes Yes Yes No N/A Yes Yes No N/A Yes



TechLaw Inc ESAT Region 5 536 South Clark Street, Suite 734 Chicago, IL 60605 (312) 353-8303 (312) 353-5814 (Fax) www.techlawinc.com

Superfund, US EPA Region 5
Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION

77 West Jackson Boulevard
Chicago IL, 60604
Project Manager: Howard Pham
GROUND WATER CONTAMINATION

Reported:
Howard Pham
Jul-16-20 13:56

### 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-TB001-200609 (E200604-01)		Matrix: W	/ater	Sampled: Ju	un-09-20 (	08:00 R	eceived: Jun-	11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.207	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.918			88.8%		64-109	"	"	"
A11-MW006-200609 (E200604-02)		Matrix: `	Water	Sampled:	Jun-09-20	11:00	Received: Jun	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	7.53			0.203	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	1.02			101%		64-109	"	"	"
A11-MW005-200609 (E200604-03)		Matrix: `	Water	Sampled:	Jun-09-20	16:15	Received: Jur	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	8.83			0.205	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.977			95.4%		64-109	"	"	"
A11-MW001-200609 (E200604-04)		Matrix:	Water	Sampled:	Jun-09-20	08:40	Received: Jur	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1.4-Dioxane	14.1			0.207	ug/L	1	E20F013	Jun-23-20	Jun-24-20

A11-MW001-200609 (E200604-04)		Matrix: \	Water	Sampled:	Jun-09- <b>2</b> 0	08:40	Received: Jun	1-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	14.1			0.207	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	1.09			106%		64-109	п	"	"

1 Link Cinc	Prepared A	Analyzed
1,1 Divante		
0/DEC	Jun-23-20 Ju	un-24-20
Surrogate Result %REC Limits Batch Pre	Prepared A	analyzed
1,4-Dioxane-d8 1.10 106% 64-109 "	"	"

Report Name: E200604 E\_Analysis\_v12 FINAL Jul 16 20 1356



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Superfund, US EPA Region 5
Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION

77 West Jackson Boulevard
Project Number: ILD981000417
Reported:
Chicago IL, 60604
Project Manager: Howard Pham
Jul-16-20 13:56

### 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-FB001-200609 (E200604-06)		Matrix: W	/ater	Sampled: Ju	ın-09-20 1'	7:30 R	eceived: Jun-	11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.207	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC	Batch	Prepared	Analyzed
1,4-Dioxane-d8	1.04			101%		Limits 64-109	"	"	"
A11-MW003-200610 (E200604-07)		Matrix:	Water	Sampled:	Jun-10-20	08:05	Received: Jun	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzeo
1,4-Dioxane	9.58			0.205	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC	Batch	Prepared	Analyzed
1,4-Dioxane-d8	1.03			100%		Limits 64-109	"	"	"
A11-MW007-200610 (E200604-08)		Matrix:	Water	Sampled:	Jun-10-20	09:50	Received: Jun	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.205	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.943			92.0%		64-109	"	"	"
A11-MW007-200610-D (E200604-09)		Matri	x: Water	Sample	d: Jun-10-2	20 09:50	Received: J	un-11-20 10:	18
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.205	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.984			96.1%		64-109	n	"	"
A11-MW002-200610 (E200604-10)		Matrix:	Water	Sampled: .	Jun-10-20	12:10	Received: Jun	n-11-20 10:18	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	4.03			0.207	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC	Batch	Prepared	Analyzed
1,4-Dioxane-d8	1.01			97.4%		Limits 64-109	"	"	"

Report Name: E200604 E\_Analysis\_v12 FINAL Jul 16 20 1356



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Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Howard Pham Jul-16-20 13:56

### 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-MW004A-200610 (E200604-11)		Matrix	: Water	Sampled	: Jun-10-2	0 14:25	Received: Ju	ın-11-20 10:1	8
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	1.51			0.203	ug/L	1	E20F013	Jun-23-20	Jun-24-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.915			90.0%		64-109	"	"	"

Report Name: E200604 E\_Analysis\_v12 FINAL Jul 16 20 1356

# Techlaw Document Controlled Number: 83074-8-33-704-DV-1330 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V SUPERFUND AND EMERGENCY MANAGEMENT DIVISION

DATE:							
SUBJECT:	Review of Data Received for Review	on: <u>July 13, 2020</u>					
FROM:	Allison Harvey, TechLaw Inc. Contractor, Environmental Services Assistance Team (ESAT)						
THROUGH:	Michelle Kerr Region 5 ESAT Contr	racting Officer's Repr	esentative				
TO:	Data User: Email Address:	CDM Smith grabsjc@cdm.com					
This package Deliverable (\$	was requested and re S4VEM)	eviewed as a Stage 4	Validation Electronic	and Manual			
We have revie	ewed the data for the fo	llowing case:					
SITE Name:	Southeast Rockf	ford Groundwater Con	tamination (IL)				
Case No: <u>489</u>	47	MA No: N/A	SDG No:	<u>E3YF9</u>			
Number and T	Type of Samples: 11 w	vaters (6 Trace Volatil	es/ 5 L/M Volatiles)				
Sample Numb	oers: <u>E3YF9, E3YG0</u> –	<u>- E3YG9</u>					
Laboratory:	Chemtech Consulting	g Group (CHM)	Hrs. for Review:				

Following are our findings:

Page 2 of 8
Case No: 48947
Site Name: Southeast Rockford Groundwater Contamination (IL)

Page 2 of 8
SDG No: E3YF9
Laboratory: CHM

### Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Eleven (11) water samples were shipped to Chemtech Consulting Group (CHM) located in Mountainside, NJ. All samples were collected 06/09-10/2020 and received on 06/11/2020 intact and properly cooled. Six (6) samples; E3YF9 and E3YG0 thru E3YG4, were analyzed for the trace volatile analytes. Five (5) samples; E3YG5 thru E3YG9, were analyzed for the low level volatile analytes. All samples were analyzed according to CLP SOW SOM02.4, [Oct 2016] and reviewed according to the June 2010 Rev 1, March, 2014 Rev 2 QAPPs for Southeast Rockford Groundwater Contamination Site, the Illinois State QAPP, the September 2017 NFG for SOM02.4 (EPA-540-R-2017-002) and the Region 5 Organic CLP Validation SOP (DCN 83074-8-33-601-SO-1143.R1).

Samples E3YG1 and E3YG8 were designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses.

Sample E3YF9 was identified as a trip blank. Sample E3YG4 was identified as a field blank. Sample E3YG7 was identified as a field duplicate of sample E3YG6.

Only the qualifications reflected in the EXES Sample Summary report are described in this narrative.

Reviewed by: Allison C. Harvey /Techlaw-ESAT

Page 3 of 8
Case No: 48947
Site Name: Southeast Rockford Groundwater Contamination (IL)

Page 3 of 8
SDG No: E3YF9
Laboratory: CHM

### 1. PRESERVATION AND HOLDING TIMES

NONE FOUND.

#### 2. GC/MS and GC/ECD INSTRUMENT PERFORMANCE CHECK

NONE FOUND.

### 3. INITIAL CALIBRATION

NONE FOUND.

### 4. INITIAL CALIBRATION VERIFICATION

NONE FOUND.

### 5. CONTINUING CALIBRATION

### Method - Volatile Organics

EXES-1209

The following samples are associated with an opening or closing CCV with % Difference exceeding criteria. Detects are qualified as estimated J. Non-detects are qualified as estimated UJ.

E3YG5, E3YG6, E3YG7, E3YG8, E3YG8MS, E3YG8MSD, VBLK85 Toluene

### 6. BLANKS

### **Method - Trace Volatiles**

The following samples have analyte results reported less than CRQLs. The associated method blank results are less than CRQL. Detects are qualified U. Sample results have been reported at CRQLs.

VHBLK01 Methylene chloride

The following samples have analyte results reported less than CRQLs. The associated trip blank (E3YF9) is less than CRQLs. Detects are qualified U. Sample results have been reported at CRQLs.

E3YG0, E3YG1, E3YG1MS, E3YG2, E3YG4 Acetone

Reviewed by: Allison C. Harvey /Techlaw-ESAT Date: 9/3/2020

Page 4 of 8
Case No: 48947
Site Name: Southeast Rockford Groundwater Contamination (IL)

Page 4 of 8
SDG No: E3YF9
Laboratory: CHM

E3YG0, E3YG4 cis-1,2-Dichloroethene

### 7. DEUTERATED MONITORING COMPOUNDS / SURROGATES

### **Method - Trace Volatiles**

#### **EXES-982**

The following samples have DMC/surrogate percent recoveries greater than the primary maximum criteria. Detects are qualified as estimated J+. Non-detects are not qualified.

E3YF9

Acetone, 2-Butanone, 4-Methyl-2-pentanone, 2-Hexanone

E3YG1, E3YG1MS, E3YG2, E3YG3, E3YG4 4-Methyl-2-pentanone, 2-Hexanone

E3YG1MSD

4-Methyl-2-pentanone, 2-Hexanone, Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

### 8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

### **Method – Volatile Organics**

EXES-1217

The following matrix spike/matrix spike duplicate samples have percent recoveries less than the expanded minimum criteria. Detects in the unspiked sample are qualified as estimated J. Non-detects in the unspiked sample are qualified as unusable R.

E3YG8MS, E3YG8MSD Toluene

#### **EXES-559**

The relative percent difference (RPD) between the following matrix spike and matrix spike duplicate recoveries is outside criteria. Detects in the unspiked sample are qualified as estimated J. Non-detects in the unspiked sample are not qualified.

E3YG8MS, E3YG8MSD Toluene

Reviewed by: Allison C. Harvey /Techlaw-ESAT Date: 9/3/2020

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Case No: 48947
Site Name: Southeast Rockford Groundwater Contamination (IL)

Page 5 of 8
SDG No: E3YF9
Laboratory: CHM

### 9. CLEANUP PROCEDURES

Not required for these analyses.

#### 10. LABORATORY CONTROL SAMPLE

Not required for these analyses.

### 11. INTERNAL STANDARD

NONE FOUND.

### 12. TARGET ANALYTE QUANTITATION LIMIT

### **Method - Trace Volatiles**

**EXES-790** 

The following samples have analyte results greater than or equal to method detection limit (MDL) and below contract required quantitation limit (CRQL). Detects are qualified as estimated J.

E3YF9

Acetone, cis-1,2-Dichloroethene

E3YG0

Chloroethane, 1,1-Dichloroethane, Cyclohexane, Trichloroethene, Isopropylbenzene

E3YG1, E3YG1MS, E3GY1MSD

trans-1,2-Dichloroethene, Chloroform, Bromodichloromethane, Tetrachloroethene, Dibromochloromethane

E3YG2

trans-1,2-Dichloroethene

E3YG3

trans-1,2-Dichloroethene, Tetrachloroethene

E3YG4

Carbon disulfide, 2-Butanone

VBLK09

Methylene chloride

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Site Name: Southeast Rockford Groundwater Contamination (IL) Laboratory: CHM

### Method - Volatile Organics

**EXES-790** 

The following samples have analyte results greater than or equal to method detection limit (MDL) and below contract required quantitation limit (CRQL). Detects are qualified as estimated J.

E3YG5

Chloroethane, 1,1,1-Trichloroethane, 4-Methyl-2-pentanone

E3YG6, E3YG7

Methylcyclohexane, Tetrachloroethene

E3YG8

Vinyl chloride, Acetone, 1,1,1-Trichloroethane, Trichloroethene

E3YG8MS, E3YG8MSD

Vinyl chloride, Acetone, 1,1,1-Trichloroethane, 1,2-Dichlorobenzene

E3YG9

1,1,1-Trichloroethane, Cyclohexane, Trichloroethene, Isopropylbenzene

#### TENTATIVELY IDENTIFIED COMPOUNDS 13.

Not Validated

#### 14. SYSTEM PERFORMANCE

No problems found.

#### **15.** FIELD QC SAMPLES

Sample E3YF9 was identified as a trip blank. Sample E3YG4 was identified as a field blank. Sample E3YG7 was identified as a field duplicate of sample E3YG6.

Results are summarized in the following table:

Sample Type:	Trip Blank	Field Blank
Sample #:	A11-TB001-200609	A11-FB001-200609
CLP Sample:	E3YF9	E3YG4
Location:	A11-TB001	A11-FB001
Collection Date/Time:	6/9/2020 08:00	6/9/2020 17:30
Units:	μg/L	μg/L
Acetone	1.7 J	

Reviewed by: Allison C. Harvey /Techlaw-ESAT

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Case No: 48947 SDG No: E3YF9
Site Name: Southeast Rockford Groundwater Contamination (IL) Laboratory: CHM

Carbon disulfide	ND	0.090 J
cis-1,2-Dichloroethene	0.29 J	
2-Butanone	ND	1.2 J
Associated field samples:	E3YG0, E3YG1	E3YG0, E3YG1,
	E3YG2, E3YG3,	E3YG2, E3YG3
	E3YG4	

ND = Not Detected.

Sample Type:	Field Sample	Field Duplicate	
Sample #:	A11-MW007-200610	A11-MW007-200610-D	
CLP Sample:	E3YG6	E3YG7	
Location:	A11-MW007	A11-MW007	
Collection Date/Time:	6/10/2020 9:50	6/10/2020 9:50	RPDs
Units:	μg/L	μg/L	%
Dilution factor:	1.0	1.0	
Methylcyclohexane	2.7 J	2.6 J	3.8
Tetrachloroethene	1.0 J	0.89 J	12
Isopropylbenzene	6.5	6.5	
CLP Sample:	E3YG6DL	E3YG7DL	
Dilution factor:	100.0	100.0	
Ethylbenzene	820	810	1.2
m,p-Xylene	2600	2600	0.0

<sup>&</sup>quot;\display" - RPD value  $\geq 20\%$ .

The detection of analytes with RPDs greater than 20% in the field duplicates are qualified as estimated J. Nondetects are qualified as estimated UJ.

### 16. SAMPLE RESULTS

The following trace volatile samples have analyte results greater than the upper limit of calibration range. The samples were not re-analyzed at dilution because they are QC samples. Detects are qualified as estimated J.

E3YG8MS, E3YG8MSD Methylcyclohexane, Toluene, Ethylbenzene, o-Xylene, m,p-Xylene

### 17. QAPP COMPLIANCE

The analytical package fulfilled the QAPP QC components requirements identified in the Southeast Rockford Groundwater Contamination QAPP.

Reviewed by: Allison C. Harvey /Techlaw-ESAT

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Case No: 48947
Site Name: Southeast Rockford Groundwater Contamination (IL)

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SDG No: E3YF9
Laboratory: CHM

#### Validation Data Qualifier Sheet

<u>Qualifiers</u>	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the results may be biased high.
J-	The result is an estimated quantity, but the results may be biased low.
NJ	The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
С	The target Pesticide or Aroclor analyte identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).
X	The target Pesticide or Aroclor analyte identification was not confirmed when GC/MS analysis was performed.

Reviewed by: Allison C. Harvey /Techlaw-ESAT Date: 9/3/2020

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YF9 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-TB001 pH: 1.0 Sample Date: 06/09/2020 Sample Time: 08:00:00

Analyte Name	Analyte	Validation	Validation	Units	Lab	Lab	Dilution	Reportable	Validation
	Туре	Result	Flag		Result	Flag	Factor	1	Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	1.7	J+	ug/L	1.7	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.29	J	ug/L	0.29	J	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG0 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-MW006 pH: 1.0 Sample Date: 06/09/2020 Sample Time: 11:00:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.44	J	ug/L	0.44	J	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5	U	ug/L	1.3	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.11	J	ug/L	0.11	J	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.5	U	ug/L	0.28	J	1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.35	J	ug/L	0.35	J	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	2.0		ug/L	2.0		1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.14	J	ug/L	0.14	J	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.14	J	ug/L	0.14	J	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
Indane	TIC	0.57	JN	ug/L	0.57	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
n-Butyl ether	TIC	12	JN	ug/L	12	JN	1.0	YES	NV
Total Alkanes	TIC	1.5	BN	ug/L	1.5	BN	1.0	YES	NV
Di-sec-butyl ether	TIC	0.72	JN	ug/L	0.72	JN	1.0	YES	NV
unknown-01	TIC	2.4	J	ug/L	2.4	J	1.0	YES	NV
Pentalene, octahydro-	TIC	0.58	JN	ug/L	0.58	JN	1.0	YES	NV
Ethane, 1-chloro-1,1-difluoro-	TIC	1.7	JN	ug/L	1.7	JN	1.0	YES	NV
4-Octanone, 5-hydroxy-3,6- dimethyl	TIC	1.3	JN	ug/L	1.3	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG1 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-MW005 pH: 1.0 Sample Date: 06/09/2020 Sample Time: 16:15:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	1.1		ug/L	1.1		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5	U	ug/L	0.87	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.15	J	ug/L	0.15	J	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.4		ug/L	6.4		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	1.3		ug/L	1.3		1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.45	J	ug/L	0.45	J	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.5		ug/L	4.5		1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.89		ug/L	0.89		1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.40	J	ug/L	0.40	J	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.39	J	ug/L	0.39	J	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.18	J	ug/L	0.18	J	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC	0.50	N	ug/L ug/L	0.50	N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG1MS Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: pH: 1.0 Sample Date: 06/09/2020 Sample Time: 16:15:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Spike	5.6		ug/L	5.6		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5	U	ug/L	1.1	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.16	J	ug/L	0.16	J	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.4		ug/L	6.4		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	1.3		ug/L	1.3		1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.45	J	ug/L	0.45	J	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.4		ug/L	4.4		1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Spike	4.8		ug/L	4.8		1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Spike	5.6		ug/L	5.6		1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.39	J	ug/L	0.39	J	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Spike	4.7		ug/L	4.7		1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.36	J	ug/L	0.36	J	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.19	J	ug/L	0.19	J	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Spike	4.8		ug/L	4.8		1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG1MSD Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: pH: 1.0 Sample Date: 06/09/2020 Sample Time: 16:15:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Spike	5.8		ug/L	5.8		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.16	J	ug/L	0.16	J	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.6		ug/L	6.6		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	1.4		ug/L	1.4		1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.48	J	ug/L	0.48	J	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	4.6		ug/L	4.6		1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Spike	5.0		ug/L	5.0		1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Spike	5.7		ug/L	5.7		1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.38	J	ug/L	0.38	J	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Spike	4.8		ug/L	4.8		1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.39	J	ug/L	0.39	J	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.21	J	ug/L	0.21	J	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Spike	5.0	J+	ug/L	5.0		1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L	2.20	N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG2 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-MW001 pH: 1.0 Sample Date: 06/09/2020 Sample Time: 08:40:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	1.4		ug/L	1.4		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5	U	ug/L	1.1	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.17	J	ug/L	0.17	J	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	7.5		ug/L	7.5		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	1.4		ug/L	1.4		1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	8.9		ug/L	8.9		1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	2.5		ug/L	2.5		1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	1.0		ug/L	1.0		1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1.2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	Ü	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	Ü	ug/L	0.50	Ü	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1.2.3-Trichlorobenzene	Target	0.50	U	ug/L ug/L	0.50	U	1.0	YES	S4VEM
Ethane, 1-chloro-1,1-difluoro-	TIC	0.77	JN	ug/L ug/L	0.77	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG3 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-MW004B pH: 1.0 Sample Date: 06/09/2020 Sample Time: 13:05:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.95		ug/L	0.95		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.16	J	ug/L	0.16	J	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.3		ug/L	6.3		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	1.3		ug/L	1.3		1.0	YES	S4VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.5		ug/L	5.5		1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	1.4		ug/L	1.4		1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	1.6		ug/L	1.6		1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.40	J	ug/L	0.40	J	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG4 Method: Trace Volatiles Matrix: Water MA Number:

Sample Location: A11-FB001 pH: 1.0 Sample Date: 06/09/2020 Sample Time: 17:30:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Acetone	Target	5	U	ug/L	3.0	J	1.0	YES	S4VEM
Carbon disulfide	Target	0.090	J	ug/L	0.090	J	1.0	YES	S4VEM
Methyl Acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	0.5	U	ug/L	0.19	J	1.0	YES	S4VEM
2-Butanone	Target	1.2	J	ug/L	1.2	J	1.0	YES	S4VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG5 Method: Volatile Organics Matrix: Water MA Number:

Sample Location: A11-MW003 pH: 1.0 Sample Date: 06/10/2020 Sample Time: 08:05:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	1.9	J	ug/L	1.9	J	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.9		ug/L	6.9		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	1.3	J	ug/L	1.3	J	1.0	YES	S4VEM
Cyclohexane	Target	7.8		ug/L	7.8		1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	59		ug/L	59		1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	2.2	J	ug/L	2.2	J	1.0	YES	S4VEM
Toluene	Target	7.6	J	ug/L	7.6		1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1.1.2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	Ü	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1.2-Dibromoethane	Target	5.0	U	ug/L	5.0	Ü	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	430	J	ug/L	430	JD	100.0	YES	S4VEM
o-xylene	Target	5.2	,	ug/L	5.2	JD	1.0	YES	S4VEM
m,p-Xylene	Target	5100	<del> </del>	ug/L	5100	D	100.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	45	1	ug/L	45		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	Ü	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L ug/L	5.0	U	1.0	YES	S4VEM
1,2,5-1110HOTOUCHZCHC	1 ai gu	13	JN	ug/L	13	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzene, 1,2,4,5-tetramethyl-	TIC	9.1	JN	ug/L	9.1	JN	1.0	YES	NV
Benzene, propyl-	TIC	53	JN	ug/L	53	JN	1.0	YES	NV
Benzene, 1,3-diethyl-	TIC	6.0	JN	ug/L	6.0	JN	1.0	YES	NV
p-Cymene	TIC	18	JN	ug/L	18	JN	1.0	YES	NV
Total Alkanes	TIC	120	BN	ug/L	120	BN	1.0	YES	NV
Benzene, 2-ethyl-1,4-dimethyl-	TIC	20	JN	ug/L	20	JN	1.0	YES	NV
Benzaldehyde, 2-methyl-	TIC	2.6	JN	ug/L	2.6	JN	1.0	YES	NV
Naphthalene, 1,2,3,4-tetrahydro-	TIC	18	JN	ug/L	18	JN	1.0	YES	NV
Benzene, (2-methyl-1-propenyl)-	TIC	27	JN	ug/L	27	JN	1.0	YES	NV
Benzene, 1,2,3,4-tetramethyl-	TIC	20	JN	ug/L	20	JN	1.0	YES	NV
Benzene, (1-methyl-1-butenyl)-	TIC	2.8	JN	ug/L	2.8	JN	1.0	YES	NV
Benzene, 1-methyl-4-propyl-	TIC	14	JN	ug/L	14	JN	1.0	YES	NV
Cyclohexene, 3-methyl-	TIC	3.1	JN	ug/L	3.1	JN	1.0	YES	NV
Benzene, (2-methylpropyl)-	TIC	4.5	JN	ug/L	4.5	JN	1.0	YES	NV
Benzene, 1-methyl-3-(1- methylethyl	TIC	4.2	JN	ug/L	4.2	JN	1.0	YES	NV
Benzene, 1,2,3-trimethyl-	TIC	85	JN	ug/L	85	JN	1.0	YES	NV
Benzene, 1,2,4-trimethyl-	TIC	220	JN	ug/L	220	JN	1.0	YES	NV
Benzeneacetaldehyde, .alpha methy	TIC	15	JN	ug/L	15	JN	1.0	YES	NV
Benzene, 1-ethyl-2-methyl-	TIC	130	JN	ug/L	130	JN	1.0	YES	NV
Benzene, 1-ethyl-3-methyl-	TIC	54	JN	ug/L	54	JN	1.0	YES	NV
Benzene, 1,2-diethyl-	TIC	23	JN	ug/L	23	JN	1.0	YES	NV
Pentalene, octahydro-	TIC	6.5	JN	ug/L	6.5	JN	1.0	YES	NV
Indan, 1-methyl-	TIC	2.5	JN	ug/L	2.5	JN	1.0	YES	NV
o-Cymene	TIC	25	JN	ug/L	25	JN	1.0	YES	NV
1-Hexadecyne	TIC	2.8	JN	ug/L	2.8	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

**Lab Name: Chemtech Consulting Group** 

Sample Number: E3YG6 Method: Volatile Organics Matrix: Water MA Number:

Sample Location: A11-MW007 pH: 1.0 Sample Date: 06/10/2020 Sample Time: 09:50:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	2.7	J	ug/L	2.7	J	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	1.0	J	ug/L	1.0	J	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	820		ug/L	820	D	100.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	2600		ug/L	2600	D	100.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.5		ug/L	6.5		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	Ü	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	Ü	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	Ü	ug/L	5.0	Ü	1.0	YES	S4VEM
1.2.4-trichlorobenzene	Target	5.0	Ü	ug/L	5.0	U	1.0	YES	S4VEM
1.2.3-Trichlorobenzene	Target	5.0	Ŭ	ug/L ug/L	5.0	U	1.0	YES	S4VEM
Mesitylene	TIC	24	JN	ug/L ug/L	24	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Total Alkanes	TIC		N	ug/L		N	1.0	YES	NV
Benzene, 1,2,3-trimethyl-	TIC	11	JN	ug/L	11	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG7 Method: Volatile Organics Matrix: Water MA Number:

Sample Location: A11-MW007 pH: 1.0 Sample Date: 06/10/2020 Sample Time: 09:50:00

Analyte Name	Analyte	Validation	Validation	Units	Lab	Lab	Dilution	Reportable	Validation
	Type	Result	Flag		Result	Flag	Factor		Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Cyclohexane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylcyclohexane	Target	2.6	J	ug/L	2.6	J	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	5.0	UJ	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	0.89	J	ug/L	0.89	J	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	810		ug/L	810	D	100.0	YES	S4VEM
o-xylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
m,p-Xylene	Target	2600		ug/L	2600	D	100.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	6.5		ug/L	6.5		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC	3.5	BN	ug/L	3.5	BN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzene, 1,2,4-trimethyl-	TIC	11	JN	ug/L	11	JN	1.0	YES	NV
Benzene, 1,2,3-trimethyl-	TIC	23	JN	ug/L	23	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG8 Method: Volatile Organics Matrix: Water MA Number:

Sample Location: A11-MW002 pH: 1.0 Sample Date: 06/10/2020 Sample Time: 12:10:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.4	J	ug/L	4.4	J	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	2.7	J	ug/L	2.7	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	11		ug/L	11		1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.4		ug/L	6.4		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	32		ug/L	32		1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	1.0	J	ug/L	1.0	J	1.0	YES	S4VEM
Cyclohexane	Target	120		ug/L	120		1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	0.86	J	ug/L	0.86	J	1.0	YES	S4VEM
Methylcyclohexane	Target	570	J	ug/L	570	JD	500.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	68000	J	ug/L	68000	D	500.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	6400		ug/L	6400	D	500.0	YES	S4VEM
o-xylene	Target	4900		ug/L	4900	D	500.0	YES	S4VEM
m,p-Xylene	Target	20000		ug/L	20000	D	500.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	98		ug/L	98		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0		ug/L	5.0		1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene, 1-ethenyl-3-ethyl-	TIC	48	JN	ug/L	48	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzene, tert-butyl-	TIC	2.6	JN	ug/L	2.6	JN	1.0	YES	NV
Benzene, 2-ethyl-1,4-dimethyl-	TIC	28	JN	ug/L	28	JN	1.0	YES	NV
3-Hexanol, 2,3-dimethyl-	TIC	8.8	JN	ug/L	8.8	JN	1.0	YES	NV
Benzene, 1,2,4,5-tetramethyl-	TIC	39	JN	ug/L	39	JN	1.0	YES	NV
1H-Indene, 2,3-dihydro-4- methyl-	TIC	9.3	JN	ug/L	9.3	JN	1.0	YES	NV
Naphthalene, 1,2,3,4-tetrahydro-	TIC	43	JN	ug/L	43	JN	1.0	YES	NV
Benzene, 1-methyl-3-(1- methylethyl	TIC	33	JN	ug/L	33	JN	1.0	YES	NV
Azulene	TIC	43	JN	ug/L	43	JN	1.0	YES	NV
Benzene, 2-propenyl-	TIC	54	JN	ug/L	54	JN	1.0	YES	NV
Benzene, 1-ethyl-2,3-dimethyl-	TIC	68	JN	ug/L	68	JN	1.0	YES	NV
2-Hexyne, 4-methyl-	TIC	3.6	JN	ug/L	3.6	JN	1.0	YES	NV
Benzeneacetaldehyde, .alpha methy	TIC	19	JN	ug/L	19	JN	1.0	YES	NV
Benzene, 1,2,4-trimethyl-	TIC	180	JN	ug/L	180	JN	1.0	YES	NV
n-Butyl ether	TIC	24	JN	ug/L	24	JN	1.0	YES	NV
Benzene, 1,2-diethyl-	TIC	10	JN	ug/L	10	JN	1.0	YES	NV
Benzene, 1,2,3-trimethyl-	TIC	130	JN	ug/L	130	JN	1.0	YES	NV
o-Cymene	TIC	44	JN	ug/L	44	JN	1.0	YES	NV
Benzene, (2-methylpropyl)-	TIC	4.5	JN	ug/L	4.5	JN	1.0	YES	NV
Total Alkanes	TIC	520	BN	ug/L	520	BN	1.0	YES	NV
p-Cymene	TIC	9.7	JN	ug/L	9.7	JN	1.0	YES	NV
Benzene, propyl-	TIC	95	JN	ug/L	95	JN	1.0	YES	NV
Mesitylene	TIC	390	JN	ug/L	390	JN	1.0	YES	NV
4-Heptanone, 2,6-dimethyl-	TIC	49	JN	ug/L	49	JN	1.0	YES	NV
Benzene, 1,2,3,4-tetramethyl-	TIC	22	JN	ug/L	22	JN	1.0	YES	NV
Benzene, 1-ethyl-2-methyl-	TIC	110	JN	ug/L	110	JN	1.0	YES	NV
Benzene, 1-ethyl-3-methyl-	TIC	310	JN	ug/L	310	JN	1.0	YES	NV
Benzene, 1-methyl-4-propyl-	TIC	25	JN	ug/L	25	JN	1.0	YES	NV
Pentalene, octahydro-, cis-	TIC	16	JN	ug/L	16	JN	1.0	YES	NV
1H-Indene, octahydro-, cis-	TIC	4.9	JN	ug/L	4.9	JN	1.0	YES	NV
2-Heptanone, 4,6-dimethyl-	TIC	6.2	JN	ug/L	6.2	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG8MS Method: Volatile Organics Matrix: Water MA Number:

Sample Location: pH: 1.0 Sample Date: 06/10/2020 Sample Time: 12:10:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.2	J	ug/L	4.2	J	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Spike	50		ug/L	50		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	2.8	J	ug/L	2.8	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	19		ug/L	19		1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.1		ug/L	6.1		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	30		ug/L	30		1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	0.97	J	ug/L	0.97	J	1.0	YES	S4VEM
Cyclohexane	Target	100		ug/L	100		1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Spike	46		ug/L	46		1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Spike	48		ug/L	48		1.0	YES	S4VEM
Methylcyclohexane	Target	590	J	ug/L	590	Е	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Spike	7200	J	ug/L	7200	Е	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Spike	50		ug/L	50		1.0	YES	S4VEM
Ethylbenzene	Target	2500	J	ug/L	2500	Е	1.0	YES	S4VEM
o-xylene	Target	4000	J	ug/L	4000	Е	1.0	YES	S4VEM
m,p-Xylene	Target	8700	J	ug/L	8700	Е	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	95		ug/L	95		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.9	J	ug/L	4.9	J	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC		N	ug/L	- *	N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG8MSD Method: Volatile Organics Matrix: Water MA Number:

Sample Location: pH: 1.0 Sample Date: 06/10/2020 Sample Time: 12:10:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	4.2	J	ug/L	4.2	J	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Spike	52		ug/L	52		1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	3.0	J	ug/L	3.0	J	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	21		ug/L	21		1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	6.3		ug/L	6.3		1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	32		ug/L	32		1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	1.0	J	ug/L	1.0	J	1.0	YES	S4VEM
Cyclohexane	Target	110		ug/L	110		1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Spike	47		ug/L	47		1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Spike	49		ug/L	49		1.0	YES	S4VEM
Methylcyclohexane	Target	630	J	ug/L	630	Е	1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Spike	7500	J	ug/L	7500	Е	1.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Spike	52		ug/L	52		1.0	YES	S4VEM
Ethylbenzene	Target	2600	J	ug/L	2600	Е	1.0	YES	S4VEM
o-xylene	Target	4300	J	ug/L	4300	Е	1.0	YES	S4VEM
m,p-Xylene	Target	8900	J	ug/L	8900	Е	1.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	98		ug/L	98		1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	4.6	J	ug/L	4.6	J	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Total Alkanes	TIC	2.0	N	ug/L	2.0	N	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Lab Name: Chemtech Consulting Group

Sample Number: E3YG9 Method: Volatile Organics Matrix: Water MA Number:

Sample Location: A11-MW004A pH: 1.0 Sample Date: 06/10/2020 Sample Time: 14:25:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Vinyl chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromomethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichlorofluoromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloro-1,2,2- trifluoroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Acetone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Carbon disulfide	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl Acetate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methylene chloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
trans-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Methyl tert-butyl Ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,2-Dichloroethene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
2-Butanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Bromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chloroform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,1-Trichloroethane	Target	3.7	J	ug/L	3.7	J	1.0	YES	S4VEM
Cyclohexane	Target	0.83	J	ug/L	0.83	J	1.0	YES	S4VEM
Carbon tetrachloride	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Trichloroethene	Target	1.0	J	ug/L	1.0	J	1.0	YES	S4VEM
Methylcyclohexane	Target	21		ug/L	21		1.0	YES	S4VEM
1,2-Dichloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromodichloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
cis-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
4-Methyl-2-pentanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Toluene	Target	52000		ug/L	52000	D	800.0	YES	S4VEM
trans-1,3-Dichloropropene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,1,2-Trichloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Tetrachloroethene	Target	5.3		ug/L	5.3		1.0	YES	S4VEM
2-Hexanone	Target	10	U	ug/L	10	U	1.0	YES	S4VEM
Dibromochloromethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromoethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Chlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Ethylbenzene	Target	330	J	ug/L	330	JD	200.0	YES	S4VEM
o-xylene	Target	71		ug/L	71		1.0	YES	S4VEM
m,p-Xylene	Target	460	J	ug/L	460	JD	200.0	YES	S4VEM
Styrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Bromoform	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Isopropylbenzene	Target	2.1	J	ug/L	2.1	J	1.0	YES	S4VEM
1,1,2,2-Tetrachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,3-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,4-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2-Dibromo-3-chloropropane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,4-trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
1,2,3-Trichlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S4VEM
Benzene, 1.2.4.5-tetramethyl-	TIC	3.5	JN	ug/L	3.5	JN	1.0	YES	NV

Project Name: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION Project

GroupID: 48947/EPW14030/E3YF9

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Benzene, 1,2,3-trimethyl-	TIC	9.6	JN	ug/L	9.6	JN	1.0	YES	NV
Benzene, 1-ethyl-3-methyl-	TIC	4.9	JN	ug/L	4.9	JN	1.0	YES	NV
Benzene, 1-ethyl-2-methyl-	TIC	3.1	JN	ug/L	3.1	JN	1.0	YES	NV
Total Alkanes	TIC	110	BN	ug/L	110	BN	1.0	YES	NV
Benzene, propyl-	TIC	3.6	JN	ug/L	3.6	JN	1.0	YES	NV
Mesitylene	TIC	3.3	JN	ug/L	3.3	JN	1.0	YES	NV
Benzene, 4-ethyl-1,2-dimethyl-	TIC	3.3	JN	ug/L	3.3	JN	1.0	YES	NV

## Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

		Data V	alidation Report				
Sample Delivery Group	(SDG) Number:	20060	)290				
Laboratory:	(,	STAT Analysis Corpo		st America	_		
Matrix: Collection date: Analysis/Methods:		:	litrogen, Nitrate EP/ Sulfate EPA 300.0 Jkalinity M2320 B	A 300.0			
		Dissolved Gases - Me	•				
Samples in SDG:  STAT Lab ID  20060290-001  20060290-002  20060290-003  20060290-004	Sample Number A11-MW001-200609 A11-MW004B-200609 A11-MW005-200609 A11-MW006-200609						
•	erformed in accordance with t nuary 2017), and the Nationa				•	•	
		Wet Che	mistry Parameters	<u>i</u>			
Were the Matrix Spike Du		defined limits)					Yes No N/A N/A Yes N/A N/A
Field Duplicates N/A		<u>Sample</u>	<u>Duplicate</u>	<u>%RPD</u>	Qualifiers	Associated Samples	
MS/MSD		%RPD	Limit		Qualifiers	Associated Samples	
Nitrogen, Nitrate 20060338-003BMS/B	MSD	Acceptable	20%				
Sulfate 20060338-003BMS/B	MSD	Acceptable	20%				
Alkalinity 20060290-003BMS/B	MSD	Acceptable	20%				
LCS/LCSD N/A		<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Duplicate N/A	e	<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Control Sampl Were the Laboratory Metl Were the Field Blanks res Was the ICAL criteria met Was the CCV criteria met Was the Tuning criteria m Were the Surrogate % red	nod Blank results all < RL? sults all < RL? t? ?		laboratory determir	ned control lim	its)		Yes No N/A Yes Yes No N/A Yes Yes N/A N/A N/A

Comments (note deviations):

Blanks		Concentration	MDL / RL		Qualifiers	Associated Samples
Nitrogen, Nitrate ICMBW1 061120	Nitrogen	0.052 J	0.2		None	Sample results nondetect or > RL
Sulfate ICMBW1 061120	Sulfate	0.377 J	4.0		None	Sample results > RL
Alkalinity ALKMBW1 061420		Nondetect			None	Sample results > RL
ICB/CCB ICB ICB	Nitrogen, Nitrate Sulfate	Concentration 0.058 0.363	MDL / RL 0.2 4.0		Qualifiers None None	Associated Samples Sample results nondetect or > RL Sample results > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.055 0.354	0.2 4.0		None None	Sample results nondetect or > RL Sample results > RL
Field Blank N/A		Concentration	MDL / RL		Qualifiers	Associated Samples
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples
MS/MSD Nitrogen, Nitrate		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples
20060338-003BMS/BM	MSD	Acceptable	90-110			
Sulfate 20060338-003BMS/BM	MSD	Acceptable	90-110			
Alkalinity 20060290-003BMS/BM	MSD	Acceptable	75-125			
LCS/LCSD Nitrogen, Nitrate		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples
ICLCSW1 061120		Acceptable	90-110			
Sulfate ICLCSW1 061120		Acceptable	90-110			
Alkalinity ALKLCSW1 061420		Acceptable	80-120			
ICV 6/11/2020 9:14	Nitrogen, Nitrate Sulfate		<u>%R</u> 73.04 Acceptable	<u>Limits</u> 90-110	Qualifiers J / UJ	Associated Samples All samples
<b>CCV</b> 6/11/2020 '11:52	Nitrogen, Nitrate Sulfate		<u>%R</u> 76.88 Acceptable	<u>Limits</u> 90-110	Qualifiers J / UJ	Associated Samples All samples
Tune N/A						
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples

#### Methane (RSK-175)

Precision:

Comments (note deviations):

Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Laboratory Control Spike Duplicates RPD within limits? Laboratory Duplicate RPDs within limits?

Yes No N/A N/A Yes Yes N/A

Field Duplicates N/A	<u>Sample</u>	<u>Duplicate</u>	<u>%RPD</u>	Qualifiers	Associated Samples	
MS/MSD 680-184999-3 MS / MSD (20060290-003)	<u>%RPD</u> Acceptable	<u>Limit</u>		Qualifiers	Associated Samples	
LCS/LCSD  Methane LCS 680-623376/ 3 / 4 LCS 680-623376/ 6 / 7	%RPD  Acceptable Acceptable	<u>Limits</u>		<u>Qualifiers</u>	Associated Samples	
Laboratory Duplicate N/A	%RPD	<u>Limits</u>		Qualifiers	Associated Samples	
Accuracy: Was the Matrix Spike/Matrix Spike Duplicate criteria Laboratory Control Sample criteria met? Were the Laboratory Method Blank results all < RL? Were the Field Blanks results all < RL? Was the ICAL criteria met? Was the CCV criteria met? Was the Tuning criteria met? Were the Surrogate % recoveries within laboratory of the Were the Internal Standard areas within ± 50 - 150% Comments (note deviations):	determined control limits?	laboratory determin	ed control lim	its)		Yes No N/A Yes Yes Yes N/A Yes Yes N/A Yes N/A N/A
<b>Blanks</b> Methane MB 680-623376/ 8	Concentration (mg/L)  Nondetect	MDL /PQL		Qualifiers	Associated Samples	
Field Blank N/A	Concentration	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A	<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
<b>MS/MSD</b> 680-184999-3 MS / MSD (20060290-003)	<u>%R</u> Acceptable	Limits (%)		Qualifiers	Associated Samples	
LCS/LCSD Methane LCS 680-623376/ 3 / 4 LCS 680-623376/ 6 / 7	<u>%R</u> Acceptable Acceptable	<u>Limits</u>		<u>Qualifiers</u>	Associated Samples	
ICAL 2/17/2020 8:45 3/04/2020 9:12	RRF Acceptable Acceptable	%RSD Acceptable Acceptable		Qualifiers	Associated Samples	

CCV 6/22/2020 15:34 6/22/2020 15:47 6/22/2020 18:44 6/22/2020 18:57		RRF Acceptable Acceptable Acceptable Acceptable	%D Acceptable Acceptable Acceptable Acceptable	<u>Limits</u>	<u>Qualifiers</u>	Associated Samples	
<b>Tune</b> N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper <u>Limit</u>		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures and desig Were holding times met? Was preservation criteria met? (0° C - Were Chain-of-Custody records comp	- 6° C) blete and provide						Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures and meth Comments (note deviations):	ods followed as o	defined in the QAPP or fi	eld change document	ation?			Yes No N/A Yes
Completeness (90%): Are all data in this SDG usable? Comments (note deviations):							Yes No N/A Yes
Sensitivity:  Are MDLs present and reported?  Do the reporting limits meet project re  Comments (note deviations):	equirements?						Yes No N/A Yes Yes
Comment: Data is usable with appropriate qu	ualifiers applied.						
Data Validator:	Kristine	Molloy	Date:	1/8/2021			

Cherie Zakowski

Date: 1/12/2021

Data Reviewer:

## **STAT Analysis Corporation**

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported:	July 06, 2020
Date Printed:	July 06, 2020

**ANALYTICAL RESULTS** 

**Client:** CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Quarterly GW Sampling, **Work Order:** 20060290 Revision 0

**Lab ID:** 20060290-001 **Collection Date:** 6/9/2020 8:40:00 AM

Client Sample ID A11-MW001-200609 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	.0		Pre	o Date: <b>6/1</b> 1	1/2020 Analyst: CAB
Nitrogen, Nitrate (As N)	1.8	0.20	*	mg/L	1	6/11/2020
Sulfate	25	4.0	*	mg/L	1	6/11/2020
Alkalinity	M232	20 B		Prep	Date: 6/14	1/2020 Analyst: MD
Alkalinity, Total (As CaCO3)	360	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSK	SOP-175		Prep	Date:	Analyst: SUB
Methane	ND	0.00058		mg/L	1	6/22/2020

**Lab ID:** 20060290-002 **Collection Date:** 6/9/2020 1:05:00 PM

Client Sample ID A11-MW004B-200609 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	.0		Prep	Date: <b>6/11</b>	/2020 Analyst: CAB
Nitrogen, Nitrate (As N)	1.1	0.20	*	mg/L	1	6/11/2020
Sulfate	19	4.0	*	mg/L	1	6/11/2020
Alkalinity	M232	20 B		Prep	Date: <b>6/14/</b>	/2020 Analyst: MD
Alkalinity, Total (As CaCO3)	340	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSK	SOP-175		Prep	Date:	Analyst: SUB
Methane	0.035	0.00058		mg/L	1	6/22/2020

**Lab ID:** 20060290-003 **Collection Date:** 6/9/2020 4:15:00 PM

Client Sample ID A11-MW005-200609 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	.0		Prep	Date: <b>6/11/2</b>	020 Analyst: CAB
Nitrogen, Nitrate (As N)	2.7	0.20	*	mg/L	1	6/11/2020
Sulfate	33	4.0	*	mg/L	1	6/11/2020
Alkalinity	M2320 B			Prep	Date: <b>6/14/2</b>	020 Analyst: MD
Alkalinity, Total (As CaCO3)	370	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSK	SOP-175		Prep	Date:	Analyst: SUB
Methane	ND	0.00058		mg/L	1	6/22/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded



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Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

**Date Reported:** July 06, 2020

ANALYTICAL RESULTS

**Date Printed:** July 06, 2020

**Client:** CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Quarterly GW Sampling, Work Order: 20060290 Revision 0

**Lab ID:** 20060290-004 **Collection Date:** 6/9/2020 11:00:00 AM

Client Sample ID A11-MW006-200609 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0			Prep	Date: <b>6/11/202</b>	O Analyst: CAB
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	6/11/2020
Sulfate	7.1	4.0	*	mg/L	1	6/11/2020
Alkalinity	M2320 E	3		Prep	Date: <b>6/14/202</b>	0 Analyst: MD
Alkalinity, Total (As CaCO3)	460	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSKSOF	P-175		Prep	Date:	Analyst: SUB
Methane	3.8	0.39		mg/L	1	6/22/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

 $\ast$  - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

# Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

Sample Delivery Group (SDG) Number:	20060338				
Laboratory:	STAT Analysis Corporation / Eurofins Test America				
Matrix:	Groundwater				
Collection date:	06/10/20				
Analysis/Methods:					

Wet Chemistry:

Anions 300.0 Alkalinity M2320 B Dissolved Gases - Methane - RSK-175

Samples in SDG:

 STAT Lab ID
 Sample Number

 20060338-001
 A11-MW002-200610

 20060338-002
 A11-MW003-200610

 20060338-003
 A11-MW004A-200610

 20060338-004
 A11-MW007-200610

 20060338-005
 A11-MW007-200610-D

Data validation was performed in accordance with the specific analytical methods, National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017).

#### Wet Chemistry Parameters

 Precision:
 Yes No N/A

 Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)?
 Yes

 Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)
 Yes

 Laboratory Control Spike Duplicates RPD within limits?
 N/A

 Laboratory Duplicate RPDs within limits?
 N/A

 Comments (note deviations):
 N/A

Field Duplicates	<u>Sample</u> A11-MW007- 200610	<u><b>Duplicate</b></u> A11-MW007-200610- D	%RPD Acceptable	Qualifiers	<u>Associated Samples</u>
MS/MSD Nitrogen, Nitrate	<u>%RPD</u>	<u>Limit</u>		Qualifiers	Associated Samples
20060338-003BMS/BMSD	Acceptable	20%			
Sulfate 20060338-003BMS/BMSD	Acceptable	20%			
Alkalinity 20060290-003BMS/BMSD	Acceptable	20%			
LCS/LCSD N/A	<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples
Laboratory Duplicate N/A	%RPD	<u>Limits</u>		Qualifiers	Associated Samples

Accuracy:	Yes No N/A
Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits)	Yes
Laboratory Control Sample criteria met?	Yes
Were the Laboratory Method Blank results all < RL?	No
Were the Field Blanks results all < RL?	N/A
Was the ICAL criteria met?	Yes
Was the CCV criteria met?	Yes
Was the Tuning criteria met?	N/A
Were the Surrogate % recoveries within laboratory determined control limits?	N/A
Were the Internal Standard areas within ± 50 - 150%?	N/A
Comments (note deviations):	

Blanks		Concentration	MDL / RL		Qualifiers	Associated Samples
Nitrogen, Nitrate ICMBW1 061120	Nitrogen	0.052 J	0.2			Sample results nondetect or > RL
Sulfate ICMBW1 061120	Sulfate	0.377 J	4.0		None	Sample results nondetect or > RL
Alkalinity ALKMBW1 061420		Nondetect				Sample results > RL
ICB/CCB		Concentration	MDL / RL		Qualifiers	Associated Samples
ICB ICB	Nitrogen, Nitrate Sulfate	0.058 0.363	0.2 4.0		None None	Sample results nondetect or > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.072 0.358	0.2 4.0		None None	Sample results nondetect or > RL
CCB CCB	Nitrogen, Nitrate Sulfate	0.076 0.361	0.2 4.0		None None	Sample results nondetect or > RL
Field Blank N/A		Concentration	MDL / RL		Qualifiers	Associated Samples
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	<u>Associated Samples</u>
MS/MSD Nitrogen, Nitrate		<u>%R</u>	Limits (%)		Qualifiers	<u>Associated Samples</u>
20060338-003BMS/BM	ISD	Acceptable	90-110			
Sulfate 20060338-003BMS/BM	ISD	Acceptable	90-110			
Alkalinity 20060290-003BMS/BM	ISD	Acceptable	75-125			
LCS/LCSD Nitrogen, Nitrate		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples
ICLCSW1 061120		Acceptable	90-110			
Sulfate ICLCSW1 061120		Acceptable	90-110			
Alkalinity ALKLCSW1 061420		Acceptable	80-120			
ICV 6/11/2020 9:14	Nitrogen, Nitrate Sulfate		%R 73.04 Acceptable	<u>Limits</u> 90-110	Qualifiers J / UJ	<u>Associated Samples</u> All samples
<b>CCV</b> 6/12/2020 '2:31	Nitrogen, Nitrate Sulfate		<u>%R</u> Acceptable Acceptable	<u>Limits</u>	Qualifiers	<u>Associated Samples</u>
6/12/2020 '5:09	Nitrogen, Nitrate Sulfate		Acceptable Acceptable			

Tune N/A

Internal Standards
N/A

Area Lower / Upper
Limit
Qualifiers
Associated Samples

Methane (RSK-175) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) N/A Laboratory Control Spike Duplicates RPD within limits? Yes Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): %RPD Field Sample **Duplicate Qualifiers** Associated Samples **Duplicates** A11-MW007-A11-MW007-200610-200610 D Acceptable MS/MSD %RPD Limit **Qualifiers** Associated Samples N/A LCS/LCSD %RPD Limits **Qualifiers** Associated Samples Methane LCS 680-623522/3/4 Acceptable LCS 680-623522/6/7 Acceptable %RPD Limits **Laboratory Duplicate Qualifiers Associated Samples** N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) N/A Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? N/A Was the ICAL criteria met? Yes Was the CCV criteria met? Yes Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? N/A Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): Concentration **Blanks** (mq/L)MDL/RL **Qualifiers** Associated Samples Methane MB 680-623522/8 Nondetect Field Blank MDL/RL Concentration **Qualifiers** Associated Samples N/A Surrogates <u>%R</u> **Limit Qualifiers** Associated Samples MS/MSD <u>%R</u> Limits (%) **Qualifiers** Associated Samples N/A LCS/LCSD <u>%R</u> **Limits Qualifiers** Associated Samples Methane LCS 680-623522/3/4 Acceptable

%RSD

Acceptable

Acceptable

**Qualifiers** Associated Samples

Acceptable

**RRF** 

Acceptable

Acceptable

LCS 680-623522/6/7

2/17/2020 8:45 3/04/2020 9:12

**ICAL** 

6/23/2020 13:44 6/23/2020 14:35 6/23/2020 17:25 6/23/2020 17:38		RRF Acceptable Acceptable Acceptable Acceptable	%D Acceptable Acceptable Acceptable Acceptable	<u>Limits</u>	<u>Qualifiers</u>	Associated Samples	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
Representativeness:							Yes No N/A
Vere sampling procedures and de Vere holding times met? Vas preservation criteria met? (0° Vere Chain-of-Custody records co	C - 6° C) omplete and provided						Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability:  Were analytical procedures and mocomments (note deviations):	ethods followed as c	defined in the QAPP or fie	eld change documentation	on?			Yes No N/A Yes
Completeness (90%):							Yes No N/A
Are all data in this SDG usable?  Comments (note deviations):							Yes
Sensitivity:							Yes No N/A
Are MDLs present and reported? On the reporting limits meet projec Comments (note deviations):	t requirements?						Yes Yes
Comment: Data is usable with appropriate	e qualifiers applied.						
Data Validator:	Kristine	Molloy	Date:	1/6/2021			

Date: 1/8/2021

Cherie Zakowski

Data Validator:

Data Reviewer:

# **STAT Analysis Corporation**

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported:	July 06, 2020
Date Printed:	July 06, 2020

ANALYTICAL RESULTS

Matrix: Aqueous

Client: CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Quarterly GW Sampling, **Work Order:** 20060338 Revision 0

**Lab ID:** 20060338-001 **Collection Date:** 6/10/2020 12:10:00 PM

Client Sample ID A11-MW002-200610

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0	0		Prep	Date: <b>6/11</b>	1/2020 Analyst: CAB
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	6/12/2020
Sulfate	ND	4.0	*	mg/L	1	6/12/2020
Alkalinity	M2320	) B		Prep	Date: <b>6/14</b>	1/2020 Analyst: MD
Alkalinity, Total (As CaCO3)	400	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSKS	OP-175		Prep	Date:	Analyst: SUB
Methane	19	0.39		mg/L	1	6/23/2020

**Lab ID:** 20060338-002 **Collection Date:** 6/10/2020 8:05:00 AM

Client Sample ID A11-MW003-200610 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300.0			Prep	Date: <b>6/11/</b>	2020 Analyst: CAB
Nitrogen, Nitrate (As N)	ND	0.20	*	mg/L	1	6/12/2020
Sulfate	9.0	4.0	*	mg/L	1	6/12/2020
Alkalinity	M2320	В		Prep	Date: <b>6/14/</b>	2020 Analyst: MD
Alkalinity, Total (As CaCO3)	380	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSKSOP-175		Prep Date:			Analyst: SUB
Methane	6.7	0.39		mg/L	1	6/23/2020

**Lab ID:** 20060338-003 **Collection Date:** 6/10/2020 2:25:00 PM

Client Sample ID A11-MW004A-200610 Matrix: Aqueous

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Anions by Ion Chromatography	E300	0.0		Prep	Date: <b>6/11</b>	/2020 Analyst: CAB
Nitrogen, Nitrate (As N)	0.65	0.20	*	mg/L	1	6/12/2020
Sulfate	35	4.0	*	mg/L	1	6/12/2020
Alkalinity	M2320 B		Prep Date: <b>6/14/2020</b>			/2020 Analyst: MD
Alkalinity, Total (As CaCO3)	350	20	m	g/L CaCO	3 1	6/14/2020
Dissolved Gases in Water	RSK	SOP-175		Prep	Date:	Analyst: SUB
Methane	0.19	0.00058		mg/L	1	6/23/2020

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

# **STAT Analysis Corporation**

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

**Date Reported:** July 06, 2020

ANALYTICAL RESULTS

**Date Printed:** July 06, 2020

**Client:** CDM Smith Inc.

**Project:** 239446, SE Rockford Area 11 Quarterly GW Sampling, **Work Order:** 20060338 Revision 0

**Lab ID:** 20060338-004 **Collection Date:** 6/10/2020 9:50:00 AM

Client Sample ID A11-MW007-200610 Matrix: Aqueous

Analyses Result Qualifier Units DF RL**Date Analyzed** Anions by Ion Chromatography E300.0 Prep Date: 6/11/2020 Analyst: CAB Nitrogen, Nitrate (As N) 6/12/2020 ND 0.20 mg/L 6/12/2020 Sulfate mg/L 29 4.0 Prep Date: 6/14/2020 Analyst: MD **Alkalinity** M2320 B Alkalinity, Total (As CaCO3) mg/L CaCO3 1 6/14/2020 370 20 **Dissolved Gases in Water** RSKSOP-175 Prep Date: Analyst: SUB Methane 0.39 mg/L 6/23/2020 3.8

**Lab ID:** 20060338-005 **Collection Date:** 6/10/2020 9:50:00 AM

Client Sample ID A11-MW007-200610-D Matrix: Aqueous

**Qualifier Units Analyses** Result RLDF **Date Analyzed** Anions by Ion Chromatography E300.0 Prep Date: 6/11/2020 Analyst: CAB Nitrogen, Nitrate (As N) ND 0.20 6/12/2020 mg/L 1 6/12/2020 Sulfate 28 4.0 mg/L **Alkalinity** M2320 B Prep Date: 6/14/2020 Analyst: MD Alkalinity, Total (As CaCO3) 360 20 mg/L CaCO3 1 6/14/2020 **Dissolved Gases in Water** RSKSOP-175 Prep Date: Analyst: SUB Methane 6/23/2020 3.9 0.39 mg/L

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

\* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded



### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

Sample Delivery Group (SDG) Number: 2009006 2009007 ESAT - US EPA Region 5 LSASD Analytical Services Branch Laboratory: Matrix: Groundwater Collection date: 9/9/2020 & 9/10/2020 Analysis/Methods: Wet Chemistry: Alkalinity M2320 B Samples in SDG: Lab ID Sample Number Lab ID Sample Number 2009006-08 A11-FB001-200909 2009007-01 A11-MW002-200910 2009006-09 A11-MW001-200909 2009007-02 A11-MW007-200910 A11-MW004B-200909 2009007-03 2009006-10 A11-MW004A-200910 A11-MW006-200909 2009007-04 A11-MW007-200910-D 2009006-11 2009006-12 A11-MW005-200909 2009007-05 A11-MW003-200910-D 2009006-13 A11-MW130A-200909 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017). Wet Chemistry Parameters (Alkalinity 2320B) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) N/A Laboratory Control Spike Duplicates RPD within limits? N/A Laboratory Duplicate RPDs within limits? Yes Comments (note deviations): Field Sample **Duplicate** %RPD **Qualifiers** Associated Samples A11-MW007-A11-MW007-200910-**Duplicates** 200910 D Acceptable MS/MSD %RPD **Limit Qualifiers** Associated Samples N/A LCS/LCSD %RPD Limits **Qualifiers Associated Samples** N/A **Laboratory Duplicate** %RPD **Limits Qualifiers** Associated Samples B20I015-DUP1 Acceptable Yes No N/A Accuracy: Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) N/A Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? Yes Was the ICAL criteria met? N/A Was the CCV criteria met? N/A N/A Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): Blanks Concentration MDL /PQL Qualifiers Associated Samples

Nondetect

B20I015-BLK1

Field Blank A11-FB001-200909		Concentration Nondetect	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
MS/MSD N/A		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
LCS/LCSD B20I015-SRM1		<u>%R</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
ICV N/A			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
CCV N/A			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures and divere holding times met? Was preservation criteria met? (0) Were Chain-of-Custody records comments (note deviations): The	° C - 6° C) omplete and provided i						Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures and n Comments (note deviations):	nethods followed as de	fined in the QAPP or fi	eld change documen	tation?			Yes No N/A Yes
Completeness (90%): Are all data in this SDG usable? Comments (note deviations):							Yes No N/A Yes
Sensitivity: Are MDLs present and reported? Do the reporting limits meet projecomments (note deviations):	ct requirements?						Yes No N/A Yes Yes
Comment: Data is usable as reported.							
Data Validator:	Kristine N	Nolloy	Date:	1/22/2021			

Date: 1/25/2021

Cherie Zakowski

Data Reviewer:



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-19-20 10:41

### Alkalinity by SM 2320B US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200909 (2009006-08)		Matrix: W	ater	r Sampled: Sep-09-20 18:00		00 Re	Received: Sep-10-20 10:05			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	U			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW001-200909 (2009006-09)		Matrix: \	Water	Sampled:	Sep-09-20 16	:25 F	Received: Sep	-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	340			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW004B-200909 (2009006-10)		Matrix: Water Sampled:		d: Sep-09-20 1	16:30	Received: Se	p-10-20 10:05	;		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	340			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW006-200909 (2009006-11)		Matrix: V	Water	Sampled:	Sep-09-20 11	:45 R	Received: Sep-	-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	440			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW005-200909 (2009006-12)		Matrix: Water		Sampled:	Sep-09-20 13	:40 F	Received: Sep-	-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	370			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW130A-200909 (2009006-13)		Matrix	: Water	Sampled: Sep-09-20 09:55		09:55	Received: Se	5		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	330			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW002-200910 (2009007-01)		Matrix: \	Water	Sampled:	Sep-10-20 13	:05 F	Received: Sep	-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	420			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	
A11-MW007-200910 (2009007-02)		Matrix: \	Water	Sampled:	Sep-10-20 10	):55 F	Received: Sep	-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
	530			20	mg CaCO3/L				Sep-15-20	



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-19-20 10:41

### Alkalinity by SM 2320B US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-200910 (2009007-03)	Matrix:	Water	Sample	Sampled: Sep-10-20 15:50			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	340			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20

A11-MW007-200910-D (2009007-04)		Matrix: Water		Sampled: Sep-10-20 10:55			Received: S	.0	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	530			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20

A11-MW003-200910-D (2009007-05)		Matrix	Matrix: Water		Sampled: Sep-10-20 08:45			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	370			20	mg CaCO3/L	1	B20I015	Sep-15-20	Sep-15-20	



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-19-20 10:41

#### **Notes and Definitions**

\* This Quality Control measure meets the requirements of the CRL SOP for this analyte.

U Not Detected NR Not Reported

Q QC limit Exceeded

Southeast Rockford Area 11 - Groundwater Samples **Data Validation Report** Sample Delivery Group (SDG) Number: 680-188662 **Eurofins Test America** Laboratory: Matrix: Groundwater Collection date: 09/09/2020 & 09/10/2020 Analysis/Methods: Dissolved Gases - Methane - RSK-175 Samples in SDG: Sample Number Lab ID Lab ID Sample Number 680-188662-1 680-188662-7 A11-MW006-200909 A11-MW003-200910 680-188662-2 A11-MW130A-200909 680-188662-8 A11-MW007-200910 A11-MW005-200909 680-188662-3 680-188662-9 A11-MW007-200910-D 680-188662-4 A11-MW001-200909 680-188662-10 A11-MW002-200910 680-188662-5 A11-MW004B-200909 680-188662-11 A11-MW004A-200910 680-188662-6 A11-FB01-200909 680-188662-12 A11-TB001-200909 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017). Methane (RSK-175) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) N/A Laboratory Control Spike Duplicates RPD within limits? Yes Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): %RPD Field Qualifiers Associated Samples Sample **Duplicate Duplicates** A11-MW007-A11-MW007-200910 200910-D Acceptable MS/MSD %RPD Limit Qualifiers Associated Samples N/A %RPD LCS/LCSD **Limits** Qualifiers Associated Samples LCS 680-635562/3/4 Acceptable LCS 680-635562/6/7 Acceptable **Laboratory Duplicate** %RPD **Limits Qualifiers** Associated Samples N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) Yes Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? No Was the ICAL criteria met? Yes Was the CCV criteria met? Yes Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? N/A Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): Concentration

(mg/L)

Nondetect

**Blanks** 

MB 680-635562/8

MDL /PQL

Qualifiers Associated Samples

Field Blank		Concentration	MDL /PQL			Associated Samples	
A11-FB01-200909	Methane	0.62	0.29 / 0.58		U-RL	680-188662-2	
A11-TB001-200909	Methane	0.64	0.29 / 0.58		U-RL	680-188662-2	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		<u>Qualifiers</u>	Associated Samples	
MS/MSD N/A		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
LCS/LCSD		<u>%R</u>	Limits		Qualifiers	Associated Samples	
LCS 680-635562/ 3 / 4		Acceptable	Limito		<u>Quanners</u>	Associated Campies	
LCS 680-635562/ 6 / 7		Acceptable					
ICAL		RRF	%RSD		Qualifiers	Associated Samples	
2/17/2020 8:45		Acceptable	Acceptable			<u> </u>	
3/04/2020 9:12		Acceptable	Acceptable				
ICV / CCV		RRF	<u>%D</u>	Limits	Qualifiers	Associated Samples	
ICV			<del></del>				
3/04/2020 11:29		Acceptable	Acceptable				
CCV							
09/23/2020 10:40		Acceptable	Acceptable				
09/23/2020 11:19		Acceptable	Acceptable				
09/23/2020 15:15		Acceptable	Acceptable				
09/23/2020 15:28		Acceptable	Acceptable				
09/23/2020 17:19		Acceptable	Acceptable				
09/23/2020 17:32		Acceptable	Acceptable				
Tune							
N/A							
Internal Standards		<u>Area</u>	Area Lower / Upper Limit		<u>Qualifiers</u>	Associated Samples	
N/A							
epresentativeness:							Yes No N/
Vere sampling procedures	and design criteria met?						Yes
Vere holding times met?							Yes
Vas preservation criteria n							No
Vere Chain-of-Custody rec comments (note deviations							Yes
		Cooler	Preservation				
Preservation		<u>Temperature</u> (Degrees C)	<u>Criteria</u>		<u>Qualifier</u>	Associated Samples	
	Methane	17.9	0 - 6 ° C		J /UJ	All samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
omparability:							Yes No N/
•		s defined in the QAPP or fi	eld change docume	ntation?			Yes
ompleteness (90%):	<del></del>						Yes No N/
are all data in this SDG usa	able?						Yes

Yes

Are all data in this SDG usable?

Comments (note deviations):

Sensitivity:	Yes No N/A
Are MDLs present and reported?	Yes
Do the reporting limits meet project requirements?	Yes
Comments (note deviations):	

#### Comment:

As noted by the laboratory, samples were received properly preserved on ice and in good condition, however, water was present in the cooler, indicating melted ice.

Data is usable with appropriate qualifiers applied.

Data Validator:	Kristine Molloy	Date: 1/22/2021
Data Reviewer:	Cherie Zakowski	Date: 1/25/2021

### **Detection Summary**

Client: CDM Smith, Inc. Job ID: 680-188662-1

Project/Site: Methane Analysis - SE Rockford Area 11

Client Sample ID: A11	ent Sample ID: A11-MW006-200909						Lab Sample ID: 680-188662-1				
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane (TCD)	4100		390	39	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW130A-200	909				Lab Sa	an	ple ID: 68	30-188662-2		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane	0.57	J	0.58	0.29	ug/L	1		RSK-175	Total/NA		
Client Sample ID: A11	-MW005-2009	09				Lab Sa	an	ple ID: 68	30-188662-3		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane	0.94		0.58	0.29	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW001-2009	09				Lab Sa	an	nple ID: 68	30-188662-4		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane	0.82		0.58	0.29	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW004B-200	909				Lab Sa	an	ple ID: 68	30-188662-5		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane	27		0.58	0.29	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-FB01-200909	)				Lab Sa	an	nple ID: 68	30-188662-6		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane	0.62		0.58		ug/L	1	=	RSK-175	Total/NA		
Client Sample ID: A11	-MW003-2009	10				Lab Sa	an	nple ID: 68	30-188662-7		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane (TCD)	3500		390	39	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW007-2009	10				Lab Sa	an	nple ID: 68	30-188662-8		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane (TCD)	25000	<u> </u>	390	39	ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW007-2009	10-D				Lab Sa	an	nple ID: 68	30-188662-9		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane (TCD)	21000		390		ug/L	1	_	RSK-175	Total/NA		
Client Sample ID: A11	-MW002-2009	10				Lab Sai	np	ole ID: 680	)-188662-10		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type		
Methane (TCD)	26000		390		ug/L		_	RSK-175	Total/NA		
Client Sample ID: A11	-MW004A-200	910				Lab Sa	m	ole ID: 680	0-188662-11		
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	ח	Method	Prep Type		
Methane	160	<u> </u>	0.58	0.29		1	_	RSK-175	Total/NA		
Client Sample ID: A11	-TB001-20090	9				Lab Sai	np	ole ID: 680	)-188662-12		
Analyte	Pacult	Qualifier	RL	MDI	Unit	Dil Fac	ח	Method	Prep Type		
Methane	0.64	<u>Quanner</u>	0.58		ug/L	1	_	RSK-175	Total/NA		
L					-						

This Detection Summary does not include radiochemical test results.

### **Client Sample Results**

Client: CDM Smith, Inc. Job ID: 680-188662-1 Project/Site: Methane Analysis - SE Rockford Area 11 Client Sample ID: A11-MW006-200909 Lab Sample ID: 680-188662-1 Date Collected: 09/09/20 11:45 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 390 09/23/20 13:06 **Methane (TCD)** 4100 39 ug/L Client Sample ID: A11-MW130A-200909 Lab Sample ID: 680-188662-2 Date Collected: 09/09/20 09:55 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Result Qualifier Analyte RL **MDL** Unit D Prepared Analyzed Dil Fac 0.58 Methane 0.57 J 0.29 ug/L 09/23/20 13:19 Client Sample ID: A11-MW005-200909 Lab Sample ID: 680-188662-3 Date Collected: 09/09/20 13:40 Matrix: Water Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 0.29 ug/L Methane 0.94 0.58 09/23/20 13:32 Client Sample ID: A11-MW001-200909 Lab Sample ID: 680-188662-4 Date Collected: 09/09/20 16:25 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit D **Prepared** Analyzed Dil Fac 0.58 0.29 ug/L 09/23/20 13:45 Methane 0.82 Client Sample ID: A11-MW004B-200909 Lab Sample ID: 680-188662-5 Date Collected: 09/09/20 16:30 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit D Analyzed Dil Fac Prepared 0.58 0.29 ug/L 09/23/20 13:58 **Methane** 27 Client Sample ID: A11-FB01-200909 Lab Sample ID: 680-188662-6 Date Collected: 09/09/20 18:00 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC) Analyte **Result Qualifier** RL **MDL** Unit ח **Prepared** Analyzed Dil Fac 0.58 **Methane** 0.62 0.29 ug/L 09/23/20 14:11 Client Sample ID: A11-MW003-200910 Lab Sample ID: 680-188662-7 Date Collected: 09/10/20 08:45 **Matrix: Water** Date Received: 09/14/20 08:50 Method: RSK-175 - Dissolved Gases (GC)

Analyzed

09/23/20 16:01

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RI

390

**MDL** Unit

39 ug/L

D

Prepared

Result Qualifier

3500

Analyte

Methane (TCD)

Dil Fac

### **Client Sample Results**

Client: CDM Smith, Inc. Job ID: 680-188662-1

Project/Site: Methane Analysis - SE Rockford Area 11

Client Sample ID: A11-MW007-200910 Lab Sample ID: 680-188662-8

Date Collected: 09/10/20 10:55 Matrix: Water

Date Received: 09/14/20 08:50

Method: RSK-175 - Dissolved Gases (GC)
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed

 Analyte
 Result Methane (TCD)
 Qualifier 25000
 RL 390
 MDL ug/L 390
 Unit ug/L 390
 D yrepared 390
 Analyzed 79/23/20 14:24
 Dil Fac 79/23/20 14:24

Client Sample ID: A11-MW007-200910-D Lab Sample ID: 680-188662-9

Date Collected: 09/10/20 10:55 Matrix: Water

Date Received: 09/14/20 08:50

 Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane (TCD)
 Qualifier 21000
 RL 390
 MDL 400
 Unit 400
 D Prepared 200/23/20 14:37
 Analyzed 200/23/20 14:37
 Dil Fac 200/23/20 14:37

Client Sample ID: A11-MW002-200910 Lab Sample ID: 680-188662-10

Date Collected: 09/10/20 13:05 Matrix: Water

Date Received: 09/14/20 08:50

Method: RSK-175 - Dissolved Gases (GC)AnalyteResult Methane (TCD)Qualifier 26000RL MDL Unit 390Unit 390D Prepared 390Analyzed 99/23/20 14:49

Client Sample ID: A11-MW004A-200910 Lab Sample ID: 680-188662-11

Date Collected: 09/10/20 15:50 Matrix: Water

Date Received: 09/14/20 08:50

Method: RSK-175 - Dissolved Gases (GC)AnalyteResult MethaneQualifier Qualifier RL Unit Ug/LMDL Unit Ug/LD Prepared Manalyzed Dil Fac 0.58

Client Sample ID: A11-TB001-200909 Lab Sample ID: 680-188662-12

Date Collected: 09/09/20 08:00 Matrix: Water

Date Received: 09/14/20 08:50

 Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Outline
 Qualifier Outline
 RL Outline
 MDL Outline
 Unit Outline
 Description
 Prepared Outline
 Analyzed Outline
 Dil Fac Outline

 Methane
 0.64
 0.58
 0.29
 ug/L
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### **Default Detection Limits**

Client: CDM Smith, Inc.

Job ID: 680-188662-1

Project/Site: Methane Analysis - SE Rockford Area 11

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	RL	MDL	Units
Methane	0.58	0.29	ug/L
Methane (TCD)	390	39	ug/L

### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

**Data Validation Report** Sample Delivery Group (SDG) Number: E200903 Laboratory: ESAT / Tech Law Matrix: Groundwater Collection date: 09/09/2020 & 09/10/2020 Analysis/Methods: 1,4-Dioxane - SW-846 8000D SIM Samples in SDG: Lab ID Sample Number Lab ID Sample Number E200901-01 A11-FB001-200909 E200902-01 A11-MW004A-200910 E200901-02 A11-MW001-200909 E200902-02 A11-MW007-200910-D A11-MW004B-200909 E200902-03 E200901-03 A11-MW007-200910 E200901-04 A11-MW005-200909 E200902-04 A11-MW003-200910 E200901-05 A11-MW006-200909 E200902-05 A11-TB002-200910 E200902-06 A11-MW002-200910 E200901-06 A11-MW130A-200909 E200901-07 A11-TB001-200909 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017). Volatile Organic Compounds 8260 / 1,4-Dioxane 8000D Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Yes Laboratory Control Spike Duplicates RPD within limits? Yes Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): Field Sample **Duplicate** %RPD **Qualifiers** Associated Samples **Duplicates** A11-MW007-A11-MW007-200910-200910 D 1,4-Dioxane ND ND MS/MSD %RPD **Limit Qualifiers** Associated Samples E20I001-MS1 / MSD1 Acceptable (E200901-04) %RPD LCS/LCSD **Limits Qualifiers Associated Samples** E20I001-BS1 / BSD1 Acceptable **Laboratory Duplicate** %RPD **Limits Qualifiers** Associated Samples N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) Yes Yes Laboratory Control Sample criteria met? Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? No Was the ICAL criteria met? Yes Was the CCV criteria met? Yes Was the Tuning criteria met? Yes Were the Surrogate % recoveries within laboratory determined control limits? Yes Were the Internal Standard areas within ± 50 - 150%? Yes Comments (note deviations): Concentration MDL /PQL **Qualifiers** Associated Samples **Blanks** E20I001-BLK1 Nondetect

Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation <u>Criteria</u>		Qualifier	Associated Samples	
epresentativeness: ere sampling procedures and ere holding times met? as preservation criteria met? ere Chain-of-Custody records omments (note deviations):	(0° C - 6° C) complete and provide						Yes No N Yes Yes Yes Yes
Internal Standards		<u>Area</u>	Area Lower / Upper Limit Acceptable		<u>Qualifiers</u>	Associated Samples	
E20I001-MRL1			Acceptable				
MRL Check			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
<b>Tune</b> Acceptable							
CCV 9/21/2020 11:50 9/21/2020 20:35		Acceptable Acceptable	Acceptable Acceptable				
ICV 5/27/2020 1:00		Acceptable	Acceptable				
ICV / CCV		RRF	<u>%D</u>	<u>Limits</u>	Qualifiers	Associated Samples	
ICAL May 27, 2020		RRF Acceptable	<u>%RSD</u> Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
LCS/LCSD E201001-BS1 / BSD1		<u>%R</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
E20I001-MS1 / MSD1 (E200901-04)	1,4-Dioxane	125 / 134	64-112		J	E200901-04	
MS/MSD		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
Surrogates		%R Acceptable	<u>Limit</u>		Qualifiers	Associated Samples	
A11-FB001-200909 A11-TB001-200909 A11-TB002-200910	<u>Analyte</u> 1,4-Dioxane	Concentration 7.81 Nondetect Nondetect	MDL / PQL 0.207		None	Associated Samples Sample results nondete	ct or > RL

Were analytical procedures and methods followed as defined in the QAPP or field change documentation? Comments (note deviations):

Yes

Completeness (90%):	Yes No N/A
Are all data in this SDG usable?	Yes
Comments (note deviations):	
Sensitivity:	Yes No N/A
Are MDLs present and reported?	Yes
Do the reporting limits meet project requirements?	Yes
Comments (note deviations):	

Comment:

Data is usable with appropriate qualifiers applied.

Kristine Molloy Date: 5/1/2021 Data Validator: Cherie Zakowski Date: 5/5/2021 Data Reviewer:



Superfund, US EPA Region 5Project:SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION77 West Jackson BoulevardProject Number:ILD981000417Reported:Chicago IL, 60604Project Manager:Michelle KerrOct-14-20 10:13

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

		,		•					
		Techl	Law - E	SAT Contr	act				
A11-FB001-200909 (E200901-01)		Matrix: W	ater	Sampled: Se	ep-09-20 1	8:00 F	Received: Sep-	10-20 10:40	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	7.81			0.207	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result 0.845			%REC 81.8%		%REC Limits 64-109	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.843			01.0%		04-109			
A11-MW001-200909 (E200901-02)		Matrix: Water		Sampled: Sep-09-20 16:25			Received: Sep		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.205	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.839			81.9%		64-109	"	"	"
A11-MW004B-200909 (E200901-03)		Matrix	: Water	Sampled	: Sep-09-2	20 16:30	Received: Se	0	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	7.86			0.207	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.779			75.4%		64-109	n .	"	"
A11-MW005-200909 (E200901-04)		Matrix:	Water	Sampled:	Sep-09-20	13:40	Received: Sep	o-10-20 10:40	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	8.18			0.205	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.801			78.2%		64-109	"	"	"
A11-MW006-200909 (E200901-05)		Matrix:	Water	Sampled:	Sep-09-20	11:45	Received: Sep	-10-20 10:40	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	8.42			0.203	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.841			82.7%		64-109	"	"	"



Superfund, US EPA Region 5Project:SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION77 West Jackson BoulevardProject Number:ILD981000417Reported:Chicago IL, 60604Project Manager:Michelle KerrOct-14-20 10:13

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-MW130A-200909 (E200901-06)		Matrix	: Water	Sampled	: Sep-09-2	20 09:55	Received: S	ep-10-20 10:4	0
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	6.10			0.205	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.824			80.4%		64-109	"	"	"
A11-TB001-200909 (E200901-07)		Matrix: W	Vater	Sampled: S	ep-09- <b>2</b> 0 0	07:30 R	eceived: Sep-	10-20 10:40	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.208	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.964			92.6%		64-109	"	"	u
4.11 PARTYON A A 200010 (F200002 01)									
411-M1W004A-200910 (E200902-01)		Matrix	: Water	Sampled	: Sep-10-2	20 15:50	Received: S	ep-11-20 10:4	4
Analyte	Result	Matrix Flags / Qualifiers	: Water  MDL	Sampled Reporting Limit	Units	20 15:50  Dilution	Received: S	ep-11-20 10:4  Prepared	4 Analyzed
Analyte	Result	Flags /		Reporting				-	
Analyte		Flags /		Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Analyte  1,4-Dioxane  Surrogate	1.09	Flags /		Reporting Limit 0.203	Units	Dilution  1  %REC	Batch E20I001	Prepared Sep-18-20	Analyzed Sep-21-20
Analyte  1,4-Dioxane  Surrogate 1,4-Dioxane-d8	1.09 Result	Flags / Qualifiers		Reporting Limit 0.203  %REC 72.5%	Units	Dilution  1  %REC Limits 64-109	Batch E20I001 Batch	Prepared Sep-18-20 Prepared	Analyzed Sep-21-20 Analyzed
Analyte  1,4-Dioxane  Surrogate 1,4-Dioxane-d8	1.09 Result	Flags / Qualifiers	MDL	Reporting Limit 0.203  %REC 72.5%	Units ug/L	Dilution  1  %REC Limits 64-109	Batch E20I001 Batch	Prepared Sep-18-20 Prepared "	Analyzed Sep-21-20 Analyzed
1,4-Dioxane  Surrogate 1,4-Dioxane-d8  411-MW007-200910-D (E200902-02)	1.09  Result 0.737	Flags / Qualifiers Matri: Flags /	MDL	Reporting Limit 0.203  %REC 72.5%  Sample Reporting	Units ug/L d: Sep-10-	Dilution  1  %REC Limits 64-109	Batch E20I001  Batch "  Received: \$	Prepared Sep-18-20 Prepared " Sep-11-20 10:4	Analyzed Sep-21-20 Analyzed "
Analyte  1,4-Dioxane  Surrogate  1,4-Dioxane-d8  A11-MW007-200910-D (E200902-02)  Analyte	Result 0.737	Flags / Qualifiers Matri: Flags /	MDL	Reporting Limit 0.203  %REC 72.5%  Sample Reporting Limit	Units ug/L d: Sep-10-	Dilution  1  %REC Limits 64-109  -20 10:55	Batch E20I001  Batch "  Received: S	Prepared Sep-18-20 Prepared " Sep-11-20 10:4	Analyzed Sep-21-20 Analyzed "  44 Analyzed

A11-MW007-200910 (E200902-03)	MW007-200910 (E200902-03) Matrix: Water				Sep-10-20	Received: Sep	Sep-11-20 10:44		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.212	0.212 ug/L		E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC	%REC Limits		Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.860			81.2%	64-109		"	n .	"



Superfund, US EPA Region 5 Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION
77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Michelle Kerr Oct-14-20 10:13

## 1,4-Dioxane by GC-MS TechLaw - ESAT Contract

A11-MW003-200910 (E200902-04) Matrix: Water				Sampled: S	Sep-10-20	08:45	Received: Sep		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	7.23			0.205	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.884			86.3%		64-109	"	"	"

A11-TB002-200910 (E200902-05)	Matrix: W	/ater	Sampled: Sep-10-20 08:00			ceived: Sep-			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	U			0.203	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.941			92.6%		64-109	"	"	"

A11-MW002-200910 (E200902-06)	Matrix: \	Water	Sampled: Sep-10-20 13:05			Received: Sep			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,4-Dioxane	2.90			0.214	ug/L	1	E20I001	Sep-18-20	Sep-21-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
1,4-Dioxane-d8	0.991			92.7%		64-109	"	"	"



Superfund, US EPA Region 5Project:SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION77 West Jackson BoulevardProject Number:ILD981000417Reported:Chicago IL, 60604Project Manager:Michelle KerrOct-14-20 10:13

## 1,4-Dioxane by GC-MS - Quality Control TechLaw - ESAT Contract

Batch E20I001 - EPA 522

Blank (E201001-BLK1)	Prepared: Sep-18-20 Analyzed: Sep-21-20										
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	U			0.200	ug/L						
Surrogate: 1,4-Dioxane-d8	0.796				"	1.00		79.6%	64-109		

LCS (E20I001-BS1) Prepared: Sep-18-20 Analyzed: Sep-21-20 Reporting RPD Flags / Spike %REC Source MDL %REC RPD Limit Units Limit Analyte Result Qualifiers Level Result Limits 0.799 0.200 ug/L 1.00 79.9% 70-106 1,4-Dioxane Surrogate: 1,4-Dioxane-d8 1.00 81.4% 64-109 0.814

LCS Dup (E201001-BSD1)	Prepared: Sep-18-20 Analyzed: Sep-21-20										
		Flags / Reporting Spike Source %REC RPD									
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	0.794			0.200	ug/L	1.00		79.4%	70-106	0.552	17
Surrogate: 1,4-Dioxane-d8	0.807				"	1.00		80.7%	64-109		

MRL Check (E20I001-MRL1)		Prepared: Sep-18-20 Analyzed: Sep-21-20									
		Flags /		Reporting	Source		%REC		RPD		
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	0.132	J		0.200	ug/L	0.200		66.2%	49-131		
Surrogate: 1,4-Dioxane-d8	0.796				"	1.00		79.6%	64-109		

Matrix Spike (E20I001-MS1)	Source:	Source: E200901-04 Prepared: Sep-18-20 Analyzed: Sep-21-20									
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	9.45	Q		0.203	ug/L	1.02	8.18	125%	64-112		
Surrogate: 1,4-Dioxane-d8	0.862				"	1.02		84.8%	64-109		

Matrix Spike Dup (E20I001-MSD1)	Source:	E200901-04 Prepared: Sep-18-20 Analyzed: Sep-21-20					ep-21-20				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
1,4-Dioxane	9.55	Q		0.205	ug/L	1.02	8.18	134%	64-112	6.72	12
Surrogate: 1,4-Dioxane-d8	0.895				"	1.02		87.4%	64-109		



Superfund, US EPA Region 5
Project: SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION

77 West Jackson Boulevard
Project Number: ILD981000417
Reported:
Chicago IL, 60604
Project Manager: Michelle Kerr
Oct-14-20 10:13

#### **Notes and Definitions**

J The identification of the analyte is acceptable; the reported value is an estimate.

U Not Detected

NR Not Reported

Q QC limit Exceeded

### Southeast Rockford Area 11 - Groundwater Samples

**Data Validation Report** Sample Delivery Group (SDG) Number: 2009006 ESAT - US EPA Region 5 LSASD Analytical Services Branch Laboratory: Matrix: Groundwater Collection date: 09/09/20 Analysis/Methods: Wet Chemistry: Anions - EPA 300.0 Samples in SDG: Lab ID Sample Number Lab ID Sample Number 2009006-08 A11-FB001-200909 2009006-11 A11-MW006-200909 A11-MW005-200909 2009006-09 A11-MW001-200909 2009006-12 2009006-10 A11-MW004B-200909 2009006-13 A11-MW130A-200909 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017). Wet Chemistry Parameters (Anions 300.0) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? N/A Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) N/A Laboratory Control Spike Duplicates RPD within limits? N/A Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): %RPD Field Sample **Qualifiers** Associated Samples **Duplicate Duplicates** N/A MS/MSD %RPD Limit **Qualifiers Associated Samples** N/A LCS/LCSD %RPD **Limits Qualifiers** Associated Samples N/A **Laboratory Duplicate** %RPD Limits **Qualifiers Associated Samples** E20I011-DUP1 Acceptable Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) No Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? Yes Was the ICAL criteria met? Yes Was the CCV criteria met? Yes Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? N/A Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): Blanks Concentration **Qualifiers** Associated Samples MDL /PQL

Nondetect

Nondetect

E20I011-BLK1 Nitrogen, Nitrate

Sulfate

ICB/CCB ICB	Nitrogen, Nitrate Sulfate	Concentration Nondetect 0.04	MDL / PQL 0.1 / 0.12		Qualifiers  None	Associated Samples Sample results > RL	
CCB	Nitrogen, Nitrate Sulfate	Nondetect 0.04	0.1 / 0.12		None	Sample results > RL	
Field Blank A11-FB001-200909		Concentration Nondetect	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
MS/MSD E201011-MS1		<u>%R</u>	Limits (%)		Qualifiers	<u>Associated Samples</u>	
Nitrogen, Nitrate Sulfate		Acceptable 69	80-120 80-120		J-/UJ	All samples	
LCS/LCSD E201011-BS1		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Nitrogen, Nitrate Sulfate		Acceptable Acceptable	90-110 90-110				
ICV	Nitrogen, Nitrate Sulfate		<u>%R</u> Acceptable Acceptable	<u>Limits</u>	Qualifiers	<u>Associated Samples</u>	
ccv	Nitrogen, Nitrate Sulfate		<u>%R</u> Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	•
MRL Check			<u>%R</u>	Limits	Qualifiers	Associated Samples	
B20I011-MRL1 Nitrogen, Nitrate Sulfate			Acceptable Acceptable				
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
							Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	<u>Preservation</u> <u>Criteria</u>		Qualifier	Associated Samples	_

**Holding Times Days to Extraction HT Criteria Qualifier Associated Samples Analyte** Acceptable Comparability: Yes No N/A Were analytical procedures and methods followed as defined in the QAPP or field change documentation? Yes Comments (note deviations): Completeness (90%): Yes No N/A Are all data in this SDG usable? Yes Comments (note deviations): Sensitivity: Yes No N/A Are MDLs present and reported? Yes Do the reporting limits meet project requirements? Yes Comments (note deviations): Comment: Data is usable with appropriate qualifiers applied. Kristine Molloy Data Validator: Date: 1/20/2021

Date: 1/25/2021

Cherie Zakowski

Data Reviewer:



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Nov-09-20 14:18

# Anions by Ion Chromatography, EPA 300.0 (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200909 (2009006-08)	Matrix: Water Sampled: Sep-09-20 18:00			00 Rec	Received: Sep-10-20 10:05				
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	U			0.12	mg/L	1	B20I011	Sep-10-20	Sep-11-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW001-200909 (2009006-09)	Matrix: Water Sampled: Sep-09-20 16:25			Received: Sep-10-20 10:05					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	n Batch	Prepared	Analyzed
Sulfate as SO4	28.9			0.12	mg/L	1	B20I011	Sep-10-20	Sep-10-20
Nitrate - NO3	11.3	_	-	0.12	"	"	"	"	"

A11-MW004B-200909 (2009006-10)	Matrix: Water Sampled: Sep-09-20 16:30			Received: Sep-10-20 10:05					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	18.8			0.12	mg/L	1	B20I011	Sep-10-20	Sep-10-20
Nitrate - NO3	5.20			0.12	"	"	"	"	"

A11-MW006-200909 (2009006-11)	Matrix: Water Sampled: Sep-09-20 1			1:45 F					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	5.02			0.12	mg/L	1	B20I011	Sep-10-20	Sep-10-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW005-200909 (2009006-12)	Matrix: Water Sample			Sep-09-20 1	3:40	Received: Sep			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	25.2	(MS), L		0.12	mg/L	1	B20I011	Sep-10-20	Sep-10-20
Nitrate - NO3	9.53			0.12	"	"	"	"	"

A11-MW130A-200909 (2009006-13)		Matrix: \	Water	Sampled:	Sampled: Sep-09-20 09:55			Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Sulfate as SO4	17.5			0.12	mg/L	1	B20I011	Sep-10-20	Sep-10-20	
Nitrate - NO3	5.91			0.12	"	"	"	"	"	

Report Name: 2009006 Anions by IC FINAL Nov 09 20 1418



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Nov-09-20 14:18

#### **Notes and Definitions**

L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater

than the reported value.

(MS) Matrix spike recovery criteria not met for this analyte

U Not Detected NR Not Reported

Q QC limit Exceeded

Report Name: 2009006 Anions by IC FINAL Nov 09 20 1418

### Southeast Rockford Area 11 - Groundwater Samples

**Data Validation Report** Sample Delivery Group (SDG) Number: 2009006 / 2009007 Laboratory: ESAT Matrix: Groundwater Collection date: 09/09/2020 & 09/10/2020 Analysis/Methods: Volatile Organic Compounds (VOCs) 8260 Samples in SDG: Lab ID Sample Number Lab ID Sample Number 2009006-01 A11-TB001-200909 2009007-06 A11-MW007-200910 2009006-02 A11-MW004B-200909 2009007-07 A11-TB002-200910 2009006-03 A11-MW005-200909 2009007-08 A11-MW007-200910-D A11-MW006-200909 2009006-04 2009007-09 A11-MW002-200910 2009006-05 A11-MW130A-200909 2009007-10 A11-MW004A-200910 2009006-06 A11-MW001-200909 2009007-11 A11-MW003-200910 2009006-07 A11-FB001-200909 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017). Volatile Organic Compounds 8260 Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Yes Laboratory Control Spike Duplicates RPD within limits? Nο Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): %RPD Field Sample **Duplicate** Qualifiers Associated Samples **Duplicates** A11-MW007-A11-MW007-200910-200910 D Acceptable MS/MSD %RPD **Limit** Qualifiers Associated Samples B20I010-MS1 / MSD1 Acceptable (2009006-03RE1) LCS/LCSD %RPD Limits Qualifiers Associated Samples B20I010-BS1 / BSD1 Acceptable 2009006-02RE1, 2009006-04RE1 J\*\* B20I012-BS1/BSD1 20 2,2-Dichloropropane 40.1 through 2009006-06RE1, 2009007-06 J\*\* 20 Toluene 27.5 through 2009007-08 2009007-06RE1, 2009007-09RE1 through 2009007-11RE1, B20I014-BS1 / BSD1 2,2-Dichloropropane 68.6 20 2009007-10RE2 through 2009007-11RE2 \*\*Qualification required for detected results only - associated results nondetect - no qualification required **Laboratory Duplicate** %RPD **Limits** Qualifiers Associated Samples

N/A

Laboratory Control Sam Were the Laboratory Me Were the Field Blanks r Was the ICAL criteria m Was the CCV criteria m Was the Tuning criteria Were the Surrogate % r	ethod Blank results all < RL? esults all < RL? eet? eet? met? recoveries within laboratory deter lard areas within ± 50 - 150%?		aboratory determine	ed control limits	;)	•	Yes No N/A Yes No Yes Yes No No Yes Yes Yes Yes Yes Yes
Blanks B20I010-BLK1 B20I010-BLK2 B20I012-BLK1 B20I014-BLK1		Concentration  Nondetect  Nondetect  Nondetect  Nondetect	MDL /PQL		<u>Qualifiers</u>	Associated Samples	
Field Blank A11-TB001-200909 A11-FB001-200909 A11-TB002-200910		Concentration Nondetect Nondetect Nondetect	MDL / PQL		Qualifiers	Associated Samples	
Surrogates		<u>%R</u> Acceptable	Limit		Qualifiers	Associated Samples	
MS/MSD B20I010-MS1 / MSD1 (2009006-03RE1)		<u>%R</u> Acceptable	Limits (%)		Qualifiers	Associated Samples	
LCS/LCSD B20I010-BS1 / BSD1		%R Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
B20I012-BS1/ BSD1	Toluene	100 / 132	70-130		J**	2009006-02RE1, 20090 through 2009006-06Ri through 2009007-08	
B20I014-BS1 / BSD1	Dichlorodifluoromethane	59.9 / 60.1	70-130		J / UJ	2009007-06RE1, 20090 through 2009007-11RI	
	2,2-Dichloropropane	99 / 48.5	70-130		J / UJ	2009007-10RE2 throug 11RE2	gh 2009007-
B20I014-BS2	Dichlorodifluoromethane 2,2-Dichloropropane	64.8 64.8	70-130 70-130		J / UJ J / UJ	2009007-08RE1, 20090	007-09RE2
	**Qualification required for dete	cted results only - assoc	iated results nonde	tect - no qualifi	cation requir	ed	
ICAL 9/10/2020	Dichlorodifluoromethane Vinyl Chloride 1,1-Dichloroethene 1,1,1-Trichloroethane Carbon Tetrachloride Tetrachloroethene 2-Hexanone **Qualification required for dete	RRF Acceptable Acceptable Acceptable Acceptable Acceptable Acceptable Acceptable	%RSD 33.61 21.97 21.3 20.64 26.3 20.48 48.57	Limits 25 20 20 20 20 20 40 40	J** J** J  J** J  J** J  J**	Associated Samples All samples	

ICV / CCV		RRF	<u>%D</u>	<u>Limits</u>	Qualifiers	Associated Samples	
9/10/2020 2:17		Acceptable	Acceptable				
CCV							
9/10/2020 1:49	Vinyl Chloride	Acceptable	43.7	25	J / UJ	2009006-01, 2009006-	07,
	Chloroethane	Acceptable	32.8	25	J / UJ	2009006-03RE1	
	1,1-Dichloroethene	Acceptable	26.9	20	J / UJ	1	
	trans-1,2-Dichloroethene	Acceptable	25.7	20	J / UJ		
	1,1,1-Trichloroethane	Acceptable	43.5	25	J / UJ		
	Trichloroethene	Acceptable	25.1	20	J / UJ		
	Tetrachloroethene	Acceptable	30.7	20	J / UJ	1	
		Acceptable	25.1	25		0000000 04 0000000	07
	Isopropylbenzene 1,2-Dibromo-3-chloropropane	Acceptable	58,5	30	7 / N7 7 / N7	2009006-01, 2009006- 2009006-03RE1	U <i>1</i> ,
9/10/2020 8:38		Acceptable	Acceptable				
9/11/2020 9:55		Acceptable	Acceptable			2009006-02RE1, 2009	006 04BE4
9/11/2020 7:06	Toluene	Acceptable	32.1	25	J / UJ	through 2009006-06R through 2009007-08	
9/15/2020 11:03	Dichlorodifluoromethane	Acceptable	40.1	40	J / UJ	2009007-06RE1, 2009 through 2009007-11R 11RE2, 2009007-10RE	E1, 2009007-
9/15/2020 11:59		Acceptable	Acceptable				
9/16/2020 8:33	trans-1,3-Dichloropropene	Acceptable	21	20	J / UJ	2009007-08RE1, 2009	007-09RE2
Tune Acceptable							
MRL Check			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
B20I010-MRL1			Acceptable				
Internal Standards		<u>Area</u>	Area Lower / Upper Limit Acceptable		Qualifiers	Associated Samples	
Were holding times me Was preservation criter Were Chain-of-Custody							Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction	HT Criteria		Qualifier	Associated Samples	
		Acceptable					
Comparability:							Yes No N/A
· ·	ures and methods followed as def tions):		d change documentati	ion?			Yes No N/A Yes

Comments (note deviations):

Sensitivity:	
Are MDLs present and reported?	
Do the reporting limits meet project requirements?	

Comments (note deviations):

#### Comment:

As stated in the case narrative, all field samples were run at a 50x screening dilution and subsequent dilutions followed. Analytes are reported from the lowest sample dilution in which they were detected within the calibration range and reporting limits are raised accordingly.

Yes No N/A Yes Yes

As stated in the case narrative, as a result of the high concentrations of toluene, ethylbenzene, and m+p-xylene present in numerous field samples, carryover occurred in several instances in the project

Data is usable with appropriate qualifiers applied.

Data Validator:	Kristine Molloy	Date:	1/21/2021
Data Reviewer:	Cherie Zakowski	Date:	1/25/2021



A11-TB001-200909 (2009006-01)

2-Hexanone

Dibromochloromethane

1,2-Dibromoethane (EDB)

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

Matrix: Water

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Sampled: Sep-09-20 07:30

Received: Sep-10-20 10:05

Flags / Reporting Analyte MDL Dilution Result Qualifiers Batch Analyzed Prepared Limit Units Dichlorodifluoromethane U (ICAL), J 2.00 ug/L B20I010 Sep-10-20 Sep-10-20 (ICAL), J 2.00 Chloromethane  $\mathbf{U}$ Vinyl chloride U (ICAL), J 2.00 Bromomethane U 2.00 U (ICAL), J Chloroethane 2.00 U (ICAL), J 2.00 Trichlorofluoromethane U 1,1-Dichloroethene 2.00 12.5 U Acetone U 2.00 Carbon disulfide Methylene chloride U trans-1,2-Dichloroethene U 2.00 U 2.00 1,1-Dichloroethane 2,2-Dichloropropane U 2.00 cis-1,2-Dichloroethene U 2.00 U " 2-Butanone 12.5 Bromochloromethane U 2.00 U 2.00 Chloroform U 2.00 1,1,1-Trichloroethane Carbon tetrachloride U 2.00 1,1-Dichloropropene U 2.00 U 2.00 Benzene U 2.00 1,2-Dichloroethane 2.00 Trichloroethene П 2.00 1,2-Dichloropropane U U 2.00 Dibromomethane Bromodichloromethane U 2.00 U 2.00 cis-1,3-Dichloropropene U 5.00 4-Methyl-2-pentanone U Toluene 2.00 trans-1,3-Dichloropropene U 2.00 1,1,2-Trichloroethane U 2.00 U 2.00 Tetrachloroethene U 2.00 1,3-Dichloropropane

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316

21 of 2054 (Full Package)

5.00

2.00

2.00

U

U

U



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB001-200909 (2009006-01)		Matrix: Water		Sampled: Se	p-09-20 0'	7:30 Rec	Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Chlorobenzene	U			2.00	ug/L	1	B20I010	Sep-10-20	Sep-10-20
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
n+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
sopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
l-Chlorotoluene	U			2.00	"	"	"	"	"
,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
ert-Butylbenzene	U			2.00	"	"	"	"	"
,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
ec-Butylbenzene	U			2.00	"	"	"	"	"
,3-Dichlorobenzene	U			2.00	"	"	"	"	"
o-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
,2-Dichlorobenzene	U			2.00	"	"	"	"	"
1-Butylbenzene	U			2.00	"	"	"	"	"
,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.76			97.0%		73-124	"	"	"
1,2-Dichloroethane-d4	9.97			98.9%		84-122	"	"	"
Toluene-d8	9.68			96.8%		88-108	"	"	"
4-Bromofluorobenzene	9.66			96.6%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004B-200909 (2009006-02RE1)			Ma	Matrix: Water		Sampled: Sep-09-20 16:30			Received: Sep-10-20 10:05		
	Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	

Dichlorodifluoromethane	U	(ICAL), J	2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Chloromethane	U	(ICAL), J	2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J	2.00	"	"	"	"	"
Bromomethane	U		2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J	2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J	2.00	"	"	"	"	"
1,1-Dichloroethene	U		2.00	"	"	"	"	"
Acetone	U		12.5	"	"	"	"	"
Carbon disulfide	U		2.00	"	"	"	"	"
Methylene chloride	U		2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U		2.00	"	"	"	"	"
1,1-Dichloroethane	5.34		2.00	"	"	"	"	"
2,2-Dichloropropane	U		2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U		2.00	"	"	"	"	"
2-Butanone	U		12.5	"	"	"	"	"
Bromochloromethane	U		2.00	"	"	"	"	"
Chloroform	U		2.00	"	"	"	"	"
1,1,1-Trichloroethane	4.93		2.00	"	"	"	"	"
Carbon tetrachloride	U		2.00	"	"	"	"	"
1,1-Dichloropropene	U		2.00	"	"	"	"	"
Benzene	U		2.00	"	"	"	"	"
1,2-Dichloroethane	U		2.00	"	"	"	"	"
Trichloroethene	U		2.00	"	"	"	"	"
1,2-Dichloropropane	U		2.00	"	"	"	"	"
Dibromomethane	U		2.00	"	"	"	"	"
Bromodichloromethane	U		2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U		2.00	"	"	"	"	"
4-Methyl-2-pentanone	U		5.00	"	"	"	"	"
Toluene	U		2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U		2.00	"	"	"	"	"
1,1,2-Trichloroethane	U		2.00	"	"	"	"	"
Tetrachloroethene	U		2.00	"	"	"	"	"
1,3-Dichloropropane	U		2.00	"	"	"	"	"
2-Hexanone	U		5.00	"	"	"	"	"
Dibromochloromethane	U		2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U		2.00	"	"	"	"	"
Chlorobenzene	U		2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004B-200909 (2009006-02RE1)		Matrix: Water Sa			pled: Sep-	09-20 16:30	Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	II	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.96			99.0%		73-124	"	"	"
1,2-Dichloroethane-d4	10.1			100%		84-122	"	"	"
Toluene-d8	9.85			98.5%		88-108	"	"	"
4-Bromofluorobenzene	9.74			97.4%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW005-200909 (2009006-03RE1)	Matrix: Water	Sampled: Sep-09-20 13:40	Received: Sep-10-20 10:05
	Flags /	D (*	

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), J		2.00	ug/L	1	B20I010	Sep-10-20	Sep-10-20
Chloromethane	U	(ICAL), J		2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J		2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	9.11			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	5.56			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW005-200909 (2009006-03RE1)		Matrix: Water		Sampled: Sep-09-20 13:40			Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20I010	Sep-10-20	Sep-10-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.2			101%		73-124	"	"	"
1,2-Dichloroethane-d4	10.2			102%		84-122	"	"	"
Toluene-d8	9.66			96.6%		88-108	"	"	"
4-Bromofluorobenzene	9.72			97.2%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



Chlorobenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-200909 (2009006-04RE1)	Matrix: Water		Sampled: Sep-09-20 11:45			Received: Sep-10-20 10:05			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), J		2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Chloromethane	U	(ICAL), J		2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J		2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	II .	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	2.28			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	n .	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316

27 of 2054 (Full Package)

2.00



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-200909 (2009006-04RE1)		Matrix: Water		Sample	Sampled: Sep-09-20 11:45			Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20	
Ethylbenzene	U			2.00	"	"	"	"	"	
m+p-Xylene	U			4.00	"	"	"	"	"	
o-Xylene	U			2.00	"	"	"	"	"	
Styrene	U			2.00	"	"	"	"	"	
Bromoform	U			2.00	"	"	"	"	"	
Isopropylbenzene	U			2.00	"	"	"	"	"	
Bromobenzene	U			2.00	"	"	"	"	"	
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"	
n-Propylbenzene	U			2.00	"	"	"	"	"	
2-Chlorotoluene	U			2.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"	
4-Chlorotoluene	U			2.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"	
tert-Butylbenzene	U			2.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"	
sec-Butylbenzene	U			2.00	"	"	"	"	"	
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"	
p-Isopropyltoluene	U			2.00	"	"	"	"	"	
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"	
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"	
n-Butylbenzene	U			2.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"	
Hexachlorobutadiene	U			2.00	"	"	"	"	"	
Naphthalene	U			2.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"	
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed	
Dibromofluoromethane	10.3			102%		73-124	"	"	"	
1,2-Dichloroethane-d4	9.98			99.0%		84-122	"	"	"	
Toluene-d8	9.77			97.7%		88-108	"	"	"	
						84-108	"	"	"	

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



A11-MW130A-200909 (2009006-05RE1)

Analyte

1,1,1-Trichloroethane

Carbon tetrachloride

1,1-Dichloropropene

1,2-Dichloroethane

1,2-Dichloropropane

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

4-Methyl-2-pentanone

1,1,2-Trichloroethane

1,3-Dichloropropane

Dibromochloromethane
1,2-Dibromoethane (EDB)

Tetrachloroethene

2-Hexanone

Chlorobenzene

Trichloroethene

Dibromomethane
Bromodichloromethane

Benzene

Toluene

#### **Environmental Protection Agency Region 5**

#### US EPA Region 5 LSASD Analytical Services Branch

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

Flags /

Qualifiers

Result

3.51

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

U

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

### Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Limit

2.00

2.00

2.00

2.00

2.00

2.00

2.00

2.00

2.00

2.00

5.00

2.00

2.00

2.00

2.00

5.00

"

"

Sampled: Sep-09-20 09:55

Units

Dilution

Batch

Received: Sep-10-20 10:05

Prepared

Analyzed

Matrix: Water

MDL

Dichlorodifluoromethane	U	(ICAL), J	2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Chloromethane	U	(ICAL), J	2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J	2.00	"	"	"	"	"
Bromomethane	U		2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J	2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J	2.00	"	"	"	"	"
1,1-Dichloroethene	U		2.00	"	"	"	"	"
Acetone	U		12.5	"	"	"	"	"
Carbon disulfide	U		2.00	"	"	"	"	"
Methylene chloride	U		2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U		2.00	"	"	"	"	"
1,1-Dichloroethane	4.11		2.00	"	"	"	"	"
2,2-Dichloropropane	U		2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U		2.00	"	"	"	"	"
2-Butanone	U		12.5	"	"	"	"	"
Bromochloromethane	U		2.00	"	"	"	"	"
Chloroform	U		2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316 29 of 2054 (Full Package)



Toluene-d8

4-Bromofluorobenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW130A-200909 (2009006-05	RE1)	Ma	r Sam	Sampled: Sep-09-20 09:55			Received: Sep-10-20 10:05		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Ethylbenzene	U			2.00	"	"	"	"	"
n+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
3romoform	U			2.00	"	"	"	"	"
sopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
-Chlorotoluene	U			2.00	"	"	"	"	"
,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
ert-Butylbenzene	U			2.00	"	"	"	"	"
,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
ec-Butylbenzene	U			2.00	"	"	"	"	"
,3-Dichlorobenzene	U			2.00	"	"	"	"	"
o-Isopropyltoluene	U			2.00	"	"	"	"	"
,4-Dichlorobenzene	U			2.00	"	"	"	"	"
,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
,2,4-Trichlorobenzene	U			2.00	"	II .	"	"	"
Hexachlorobutadiene	U			2.00	"	II .	"	"	"
Naphthalene	U			2.00	"	II .	"	n .	"
,2,3-Trichlorobenzene	U			2.00	"	H	"	11	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.1			101%		73-124	"	"	"
1,2-Dichloroethane-d4	10.2			101%		84-122	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316

88-108

84-108

30 of 2054 (Full Package)

97.9%

89.4%

9.79

8.94



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW001-200909 (2009006-06RE1)	Matrix: Water	Sampled: Sep-09-20 16:25	Received: Sep-10-20 10:05
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Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), J		2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Chloromethane	U	(ICAL), J		2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J		2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	5.16			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	7.58			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	2.41			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



Toluene-d8

4-Bromofluorobenzene

#### **Environmental Protection Agency Region 5**

#### US EPA Region 5 LSASD Analytical Services Branch

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

### Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW001-200909 (2009006-06RE1) Matrix: Water Sampled: Sep-09-20 16:25 Received: Sep-10-20 10:05 Flags / Reporting Analyte Qualifiers MDL Result Dilution Batch Prepared Analyzed Limit Units 1,1,1,2-Tetrachloroethane U 2.00 ug/L B20I012 Sep-11-20 Sep-11-20 Ethylbenzene U 2.00 U 4.00 m+p-Xylene U 2.00 o-Xylene U 2.00 Styrene U 2.00 Bromoform U 2.00 Isopropylbenzene 2.00 U Bromobenzene 1,2,3-Trichloropropane U 2.00 n-Propylbenzene U 2.00 " U 2.00 2-Chlorotoluene 1,3,5-Trimethylbenzene U 2.00 U 2.00 4-Chlorotoluene U 2.00 1,1,2,2-Tetrachloroethane tert-Butylbenzene U 2.00 " " 1,2,4-Trimethylbenzene U 2.00 2.00 sec-Butylbenzene U U 2.00 1,3-Dichlorobenzene U 2.00 p-Isopropyltoluene U 2.00 1,4-Dichlorobenzene 1,2-Dichlorobenzene U 2.00 U n-Butylbenzene 2.00 1,2-Dibromo-3-chloropropane U 2.00 2.00 U 1,2,4-Trichlorobenzene U 2.00 " Hexachlorobutadiene Naphthalene U 2.00 2.00 1,2,3-Trichlorobenzene U %REC %REC Analyzed Surrogate Result Batch Prepared Limits Dibromofluoromethane 9.77 97.2% 73-124 1.2-Dichloroethane-d4 10.2 101% 84-122

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316

88-108

84-108

32 of 2054 (Full Package)

96.5%

97.0%

9.65

9.70



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200909 (2009006-07)			Sampled: Sep-09-20 18:00 Received: Sep-10-20 10:0						
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), J		2.00	ug/L	1	B20I010	Sep-10-20	Sep-10-20
Chloromethane	U	(ICAL), J		2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J		2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	II .	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-200909 (2009006-07)		Matrix: W	ater	Sampled: Se	8:00 Rec	Received: Sep-10-20 10:05			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20I010	Sep-10-20	Sep-10-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.2			101%		73-124	"	"	"
1,2-Dichloroethane-d4	9.97			98.9%		84-122	"	"	"
Toluene-d8	9.90			99.0%		88-108	"	"	"
4-Bromofluorobenzene	9.50			95.0%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



4-Bromofluorobenzene

#### **Environmental Protection Agency Region 5**

#### US EPA Region 5 LSASD Analytical Services Branch

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

9.92

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200910 (2009007-06) Matrix: Water Sampled: Sep-10-20 10:55 Received: Sep-11-20 10:10 Flags / Reporting Analyte MDL Qualifiers Dilution Result Batch Prepared Analyzed Limit Units Ethylbenzene 2630 100 ug/L 50 B20I012 Sep-11-20 Sep-11-20 200 m+p-Xylene 7600 %REC %REC Analyzed Surrogate Result Batch Prepared Dibromofluoromethane 9.60 95.4% 73-124 1,2-Dichloroethane-d4 103% 84-122 10.4 Toluene-d8 9.50 95.0% 88-108

99.2%

84-108

A11-MW007-200910 (2009007-06RE1)	Matrix: Water		Sampled: Sep-10-20 10:55			Received: Sep-11-20 10:10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), (LCS), J		10.0	ug/L	5	B20I014	Sep-15-20	Sep-15-20
Chloromethane	U	(ICAL), J		10.0	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U	(ICAL), J		10.0	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		10.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			10.0	"	"	"	"	"
2-Butanone	U			62.5	"	"	"	"	"
Bromochloromethane	U			10.0	"	"	"	"	"
Chloroform	U			10.0	"	"	"	"	"
1,1,1-Trichloroethane	U			10.0	"	"	"	"	"
Carbon tetrachloride	U			10.0	"	"	"	"	"
1,1-Dichloropropene	U			10.0	"	"	"	"	"
Benzene	U			10.0	"	"	"	"	"
1,2-Dichloroethane	U			10.0	"	"	"	"	"
Trichloroethene	U			10.0	"	"	"	"	"
1,2-Dichloropropane	U			10.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200910 (2009007-06RE1)		Matı	rix: Water	Sampled: Sep-10-20 10:55			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dibromomethane	U			10.0	ug/L	5	B20I014	Sep-15-20	Sep-15-20
Bromodichloromethane	U			10.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			10.0	"	"	"	"	"
4-Methyl-2-pentanone	U			25.0	"	"	"	"	"
Toluene	U			10.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			10.0	"	"	"	"	"
1,1,2-Trichloroethane	U			10.0	"	"	"	"	"
Tetrachloroethene	U			10.0	"	"	"	"	"
1,3-Dichloropropane	U			10.0	"	"	"	"	"
2-Hexanone	U			25.0	"	"	"	"	"
Dibromochloromethane	U			10.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			10.0	"	"	"	"	"
Chlorobenzene	U			10.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			10.0	"	"	"	"	"
o-Xylene	U			10.0	"	"	"	"	"
Styrene	U			10.0	"	"	"	"	"
Bromoform	U			10.0	"	"	"	"	"
Isopropylbenzene	86.1			10.0	"	"	"	"	"
Bromobenzene	U			10.0	"	"	"	"	"
1,2,3-Trichloropropane	U			10.0	"	"	"	"	"
n-Propylbenzene	82.4			10.0	"	"	"	"	"
2-Chlorotoluene	U			10.0	"	"	"	"	"
1,3,5-Trimethylbenzene	11.1			10.0	"	"	"	"	"
4-Chlorotoluene	U			10.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			10.0	"	"	"	"	"
tert-Butylbenzene	U			10.0	"	"	"	"	"
1,2,4-Trimethylbenzene	53.5			10.0	"	"	"	"	"
sec-Butylbenzene	10.8			10.0	"	"	"	"	"
1,3-Dichlorobenzene	U			10.0	"	"	"	"	"
p-Isopropyltoluene	U			10.0	"	"	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	11.3			10.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	"	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316

36 of 2054 (Full Package)

10.0

11.4

Naphthalene



4-Bromofluorobenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

9.94

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200910 (2009007-06RE1) Matrix: Water Sampled: Sep-10-20 10:55 Received: Sep-11-20 10:10 Flags / Reporting Analyte Qualifiers MDL Result Dilution Batch Prepared Analyzed Limit Units 1,2,3-Trichlorobenzene U 10.0 ug/L 5 B20I014 Sep-15-20 Sep-15-20 %REC %REC Analyzed Surrogate Result Batch Prepared Limits Dibromofluoromethane 9.74 96.8% 73-124 1,2-Dichloroethane-d4 10.2 101% 84-122 95.0% 88-108 Toluene-d8 9.50

99.4%

84-108

A11-TB002-200910 (2009007-07)		Matrix: Water		Sampled: Se	p-10-20 08:	00 Rec	Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), J		2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Chloromethane	U	(ICAL), J		2.00	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U	(ICAL), J		2.00	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB002-200910 (2009007-07)				Sampled: Sep-10-20 08:00 Re			eived: Sep-1		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
cis-1,3-Dichloropropene	U			2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB002-200910 (2009007-07)		Matrix: W	ater	Sampled: Se	ep-10-20 0	8:00 Red	eived: Sep-1	11-20 10:10	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,3-Trichlorobenzene	U			2.00	ug/L	1	B20I012	Sep-11-20	Sep-11-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.70			96.4%		73-124	"	"	"
1,2-Dichloroethane-d4	10.2			101%		84-122	"	"	"
Toluene-d8	9.62			96.2%		88-108	"	"	"
4-Bromofluorobenzene	9.55			95.5%		84-108	"	"	"

A11-MW007-200910-D (2009007-08)		Matrix	: Water	Sampled	l: Sep-10-	20 10:55	Received: S	ep-11-20 10:1	.0
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethylbenzene	2680			100	ug/L	50	B20I012	Sep-11-20	Sep-11-20
m+p-Xylene	7920			200	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.92			98.6%		73-124	"	"	"
1,2-Dichloroethane-d4	9.93			98.5%		84-122	"	"	"
Toluene-d8	9.75			97.5%		88-108	"	"	"
4-Bromofluorobenzene	9.79			97.9%		84-108	"	"	"

A11-MW007-200910-D (2009007-08RE	1)	Ma	atrix: Wat	ter S	ampled: Sep-1	0-20 10:55	Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), (LCS), J		10.0	ug/L	5	B20I014	Sep-15-20	Sep-16-20
Chloromethane	U	(ICAL), J		10.0	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U	(ICAL), J		10.0	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		10.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200910-D (2009007-08RE1)		Matrix: Water			mpled: Sep-	10-20 10:55	Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
cis-1,2-Dichloroethene	U			10.0	ug/L	5	B20I014	Sep-15-20	Sep-16-20
2-Butanone	U			62.5	"	"	"	"	"
Bromochloromethane	U			10.0	"	"	"	"	"
Chloroform	U			10.0	"	"	"	"	"
1,1,1-Trichloroethane	U			10.0	"	"	"	"	"
Carbon tetrachloride	U			10.0	"	"	"	"	"
1,1-Dichloropropene	U			10.0	"	"	"	"	"
Benzene	U			10.0	"	"	"	"	"
1,2-Dichloroethane	U			10.0	"	"	"	"	"
Trichloroethene	U			10.0	"	"	"	"	"
1,2-Dichloropropane	U			10.0	"	"	"	"	"
Dibromomethane	U			10.0	"	"	"	"	"
Bromodichloromethane	U			10.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			10.0	"	"	"	"	"
4-Methyl-2-pentanone	U			25.0	"	"	"	"	"
Toluene	U			10.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			10.0	"	"	"	"	"
1,1,2-Trichloroethane	U			10.0	"	"	"	"	"
Tetrachloroethene	U			10.0	"	"	"	"	"
1,3-Dichloropropane	U			10.0	"	"	"	"	"
2-Hexanone	U			25.0	"	"	"	"	"
Dibromochloromethane	U			10.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			10.0	"	"	"	"	"
Chlorobenzene	U			10.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			10.0	"	"	"	"	"
o-Xylene	U			10.0	"	"	"	"	"
Styrene	U			10.0	"	"	"	"	"
Bromoform	U			10.0	"	"	"	"	"
Isopropylbenzene	89.1			10.0	"	"	"	"	"
Bromobenzene	U			10.0	"	"	"	"	"
1,2,3-Trichloropropane	U			10.0	"	"	"	"	"
n-Propylbenzene	84.7			10.0	"	"	"	"	"
2-Chlorotoluene	U			10.0	"	"	"	"	"
1,3,5-Trimethylbenzene	11.6			10.0	"	"	"	"	"
4-Chlorotoluene	U			10.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			10.0	"	n .	"	"	"
tert-Butylbenzene	U			10.0	"	,,	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-200910-D (2009007-08I	RE1)	M	atrix: Wa	ter San	npled: Sep-	-10-20 10:55	Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,4-Trimethylbenzene	55.7			10.0	ug/L	5	B20I014	Sep-15-20	Sep-16-20
sec-Butylbenzene	11.3			10.0	"	"	"	"	"
1,3-Dichlorobenzene	U			10.0	"	"	"	"	"
p-Isopropyltoluene	U			10.0	"	"	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	12.4			10.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	"	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"
Naphthalene	13.2			10.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			10.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.84			97.8%		73-124	"	"	"
1,2-Dichloroethane-d4	10.3			102%		84-122	"	"	"
Toluene-d8	9.49			94.9%		88-108	"	"	"
4-Bromofluorobenzene	10.0			100%		84-108	"	"	"

A11-MW002-200910 (2009007-09RE1)		Matr	Matrix: Water		Sampled: Sep-10-20 13:05			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Toluene	39300			1600	ug/L	800	B20I014	Sep-15-20	Sep-15-20	
Ethylbenzene	8260			1600	"	"	"	"	"	
m+p-Xylene	26000			3200	"	"	"	"	"	
o-Xylene	6820			1600	"	"	"	"	"	
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed	
Dibromofluoromethane	9.62			95.6%		73-124	"	"	"	
1,2-Dichloroethane-d4	9.94			98.6%		84-122	"	"	"	
Toluene-d8	9.49			94.9%		88-108	"	"	"	
4-Bromofluorobenzene	9.48			94.8%		84-108	"	"	"	

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200910 (2009007-09RE2) Matrix: Water Sampled: Sep-10-20 13:05 Received: Sep-11-20 10:10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), (LCS), J		50.0	ug/L	25	B20I014	Sep-15-20	Sep-16-20
Chloromethane	U	(ICAL), J		50.0	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		50.0	"	"	"	"	"
Bromomethane	U			50.0	"	"	"	"	"
Chloroethane	U	(ICAL), J		50.0	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		50.0	"	"	"	"	"
1,1-Dichloroethene	U			50.0	"	"	"	"	"
Acetone	U			312	"	"	"	"	"
Carbon disulfide	U			50.0	"	"	"	"	"
Methylene chloride	U			50.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			50.0	"	"	"	"	"
1,1-Dichloroethane	U			50.0	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		50.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			50.0	"	"	"	"	"
2-Butanone	U			312	"	"	"	"	"
Bromochloromethane	U			50.0	"	"	"	"	"
Chloroform	U			50.0	"	"	"	"	"
1,1,1-Trichloroethane	U			50.0	"	"	"	"	"
Carbon tetrachloride	U			50.0	"	"	"	"	"
1,1-Dichloropropene	U			50.0	"	"	"	"	"
Benzene	U			50.0	"	"	"	"	"
1,2-Dichloroethane	U			50.0	"	"	"	"	"
Trichloroethene	U			50.0	"	"	"	"	"
1,2-Dichloropropane	U			50.0	"	"	"	"	"
Dibromomethane	U			50.0	"	"	"	"	"
Bromodichloromethane	U			50.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			50.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			50.0	"	"	"	"	"
1,1,2-Trichloroethane	U			50.0	"	"	"	"	"
Tetrachloroethene	U			50.0	"	"	"	"	"
1,3-Dichloropropane	U			50.0	"	"	"	"	"
2-Hexanone	U			125	"	"	"	"	"
Dibromochloromethane	U			50.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			50.0	"	"	"	"	"
Chlorobenzene	U			50.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			50.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200910 (2009007-09RE2)	Matrix: Water		Sampl	Sampled: Sep-10-20 13:05			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Styrene	U			50.0	ug/L	25	B20I014	Sep-15-20	Sep-16-20
Bromoform	U			50.0	"	"	"	"	"
Isopropylbenzene	90.0			50.0	"	"	"	"	"
Bromobenzene	U			50.0	"	"	"	"	"
1,2,3-Trichloropropane	U			50.0	"	"	"	"	"
n-Propylbenzene	129			50.0	"	"	"	"	"
2-Chlorotoluene	U			50.0	"	"	"	"	"
1,3,5-Trimethylbenzene	202			50.0	"	"	"	"	"
4-Chlorotoluene	U			50.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			50.0	"	"	"	"	"
tert-Butylbenzene	U			50.0	"	"	"	"	"
1,2,4-Trimethylbenzene	622			50.0	"	"	"	"	"
sec-Butylbenzene	U			50.0	"	"	"	"	"
1,3-Dichlorobenzene	U			50.0	"	"	"	"	"
p-Isopropyltoluene	U			50.0	"	"	"	"	"
1,4-Dichlorobenzene	U			50.0	"	"	"	"	"
1,2-Dichlorobenzene	U			50.0	"	"	"	"	"
n-Butylbenzene	U			50.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			50.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			50.0	"	"	"	"	"
Hexachlorobutadiene	U			50.0	"	"	"	"	"
Naphthalene	55.2			50.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			50.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.36			93.1%		73-124	"	"	"
1,2-Dichloroethane-d4	10.1			100%		84-122	"	"	"
Toluene-d8	9.73			97.3%		88-108	"	"	"
4-Bromofluorobenzene	9.71			97.1%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-200910 (2009007-10RE1) Matrix: Water Sampled: Sep-10-20 15:50 Received: Sep-11-20 10:10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Toluene	42600			1000	ug/L	500	B20I014	Sep-15-20	Sep-15-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.68			96.3%		73-124	"	"	"
1,2-Dichloroethane-d4	10.4			103%		84-122	"	"	"
Toluene-d8	9.69			96.9%		88-108	"	"	"
4-Bromofluorobenzene	8.91			89.1%		84-108	"	"	"

A11-MW004A-200910 (2009007-10RE2)		Ma	trix: Water	Sam	Sampled: Sep-10-20 15:50			Received: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Dichlorodifluoromethane	U	(ICAL), (LCS), J		50.0	ug/L	25	B20I014	Sep-15-20	Sep-15-20	
Chloromethane	U	(ICAL), J		50.0	"	"	"	"	"	
Vinyl chloride	U	(ICAL), J		50.0	"	"	"	"	"	
Bromomethane	U			50.0	"	"	"	"	"	
Chloroethane	U	(ICAL), J		50.0	"	"	"	"	"	
Trichlorofluoromethane	U	(ICAL), J		50.0	"	"	"	"	"	
1,1-Dichloroethene	U			50.0	"	"	"	"	"	
Acetone	U			312	"	"	"	"	"	
Carbon disulfide	U			50.0	"	"	"	"	"	
Methylene chloride	U			50.0	"	"	"	"	"	
trans-1,2-Dichloroethene	U			50.0	"	"	"	"	"	
1,1-Dichloroethane	U			50.0	"	"	"	"	"	
2,2-Dichloropropane	U	(LCS), J		50.0	"	"	"	"	"	
cis-1,2-Dichloroethene	U			50.0	"	"	"	"	"	
2-Butanone	U			312	"	"	"	"	"	
Bromochloromethane	U			50.0	"	"	"	"	"	
Chloroform	U			50.0	"	"	"	"	"	
1,1,1-Trichloroethane	U			50.0	"	"	"	"	"	
Carbon tetrachloride	U			50.0	"	"	"	"	"	
1,1-Dichloropropene	U			50.0	"	"	"	"	"	
Benzene	U			50.0	"	"	"	"	"	
1,2-Dichloroethane	U			50.0	"	"	"	"	"	
Trichloroethene	U			50.0	"	"	"	"	"	
1,2-Dichloropropane	U			50.0	"	"	"	"	"	
Dibromomethane	U			50.0	"	"	"	"	"	

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-200910 (2009007-10RE2)	Matrix: Water	Sampled: Sep-10-20 15:50	Received: Sep-11-20 10:10
M11=141 44 00 4 M=2007 10 (2007 00 /=101	mati in water	5ampicu. 5cp-10-20 15.50	14CCC14Cu. 5Cp-11-20 10.10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromodichloromethane	U			50.0	ug/L	25	B20I014	Sep-15-20	Sep-15-20
cis-1,3-Dichloropropene	U			50.0	"	"	"	"	"
4-Methyl-2-pentanone	U			125	"	"	"	"	"
trans-1,3-Dichloropropene	U			50.0	"	"	"	"	"
1,1,2-Trichloroethane	U			50.0	"	"	"	"	"
Tetrachloroethene	U			50.0	"	"	"	"	"
1,3-Dichloropropane	U			50.0	"	"	"	"	"
2-Hexanone	U			125	"	"	"	"	"
Dibromochloromethane	U			50.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			50.0	"	"	"	"	"
Chlorobenzene	U			50.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			50.0	"	"	"	"	"
Ethylbenzene	365			50.0	"	"	"	"	"
m+p-Xylene	538			100	"	"	"	"	"
o-Xylene	66.6			50.0	"	"	"	"	"
Styrene	U			50.0	"	"	"	"	"
Bromoform	U			50.0	"	"	"	"	"
Isopropylbenzene	U			50.0	"	"	"	"	"
Bromobenzene	U			50.0	"	"	"	"	"
1,2,3-Trichloropropane	U			50.0	"	"	"	"	"
n-Propylbenzene	U			50.0	"	"	"	"	"
2-Chlorotoluene	U			50.0	"	"	"	"	"
1,3,5-Trimethylbenzene	U			50.0	"	"	"	"	"
4-Chlorotoluene	U			50.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			50.0	"	"	"	"	"
tert-Butylbenzene	U			50.0	"	"	"	"	"
1,2,4-Trimethylbenzene	U			50.0	"	"	"	"	"
sec-Butylbenzene	U			50.0	"	"	"	"	"
1,3-Dichlorobenzene	U			50.0	"	"	"	"	"
p-Isopropyltoluene	U			50.0	"	"	"	"	"
1,4-Dichlorobenzene	U			50.0	"	"	"	"	"
1,2-Dichlorobenzene	U			50.0	"	"	"	"	"
n-Butylbenzene	U			50.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			50.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			50.0	"	"	"	"	"
Hexachlorobutadiene	U			50.0	"	"	"	"	"
Naphthalene	U			50.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

.11-MW004A-200910 (2009007-10RE2)		Ma	Matrix: Water Sample		pled: Sep-	10-20 15:50	Receive	d: Sep-11-20	10:10
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,3-Trichlorobenzene	U			50.0	ug/L	25	B20I014	Sep-15-20	Sep-15-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.35			92.9%		73-124	"	"	"
1,2-Dichloroethane-d4	10.1			101%		84-122	"	"	"
Toluene-d8	9.49			94.9%		88-108	"	"	"
4-Bromofluorohenzene	9.68			06.8%		84-108	"	"	"

A11-MW003-200910 (2009007-11RE1)	.11-MW003-200910 (2009007-11RE1)			Sampl	ed: Sep-10	0-20 08:45	Received:	Sep-11-20 10	:10
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
m+p-Xylene	2430			100	ug/L	25	B20I014	Sep-15-20	Sep-15-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.95			98.9%		73-124	"	"	"
1,2-Dichloroethane-d4	10.4			103%		84-122	"	"	"
Toluene-d8	9.44			94.4%		88-108	"	"	"
4-Bromofluorobenzene	9.63			96.3%		84-108	"	"	"

A11-MW003-200910 (2009007-11RE2)	11-MW003-200910 (2009007-11RE2)			Water Sampled: Sep-10-20 08:45		Received: Sep-11-20 10:10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U	(ICAL), (LCS), J		10.0	ug/L	5	B20I014	Sep-15-20	Sep-15-20
Chloromethane	U	(ICAL), J		10.0	"	"	"	"	"
Vinyl chloride	U	(ICAL), J		10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U	(ICAL), J		10.0	"	"	"	"	"
Trichlorofluoromethane	U	(ICAL), J		10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		10.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			10.0	"	"	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-200910 (2009007-11RE2)		Matr	rix: Water	Sample	ed: Sep-10-	-20 08:45	Received:	red: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
2-Butanone	U			62.5	ug/L	5	B20I014	Sep-15-20	Sep-15-20	
Bromochloromethane	U			10.0	"	"	"	"	"	
Chloroform	U			10.0	"	"	"	"	"	
1,1,1-Trichloroethane	U			10.0	"	"	"	"	"	
Carbon tetrachloride	U			10.0	"	"	"	"	"	
1,1-Dichloropropene	U			10.0	"	"	"	"	"	
Benzene	U			10.0	"	"	"	"	"	
1,2-Dichloroethane	U			10.0	"	"	"	"	"	
Trichloroethene	U			10.0	"	"	"	"	"	
1,2-Dichloropropane	U			10.0	"	"	n .	"	"	
Dibromomethane	U			10.0	"	"	"	"	"	
Bromodichloromethane	U			10.0	"	"	"	"	"	
cis-1,3-Dichloropropene	U			10.0	"	"	"	"	"	
4-Methyl-2-pentanone	U			25.0	"	"	II .	"	"	
Toluene	U			10.0	"	"	"	"	"	
trans-1,3-Dichloropropene	U			10.0	"	"	"	"	"	
1,1,2-Trichloroethane	U			10.0	"	"	"	"	"	
Tetrachloroethene	U			10.0	"	"	"	"	"	
1,3-Dichloropropane	U			10.0	"	"	"	"	"	
2-Hexanone	U			25.0	"	"	"	"	"	
Dibromochloromethane	U			10.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	U			10.0	"	"	"	"	"	
Chlorobenzene	U			10.0	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	U			10.0	"	"	"	"	"	
Ethylbenzene	201			10.0	"	"	"	"	"	
o-Xylene	U			10.0	"	"	"	"	"	
Styrene	U			10.0	"	"	"	"	"	
Bromoform	U			10.0	"	"	"	"	"	
Isopropylbenzene	28.3			10.0	"	"	"	"	"	
Bromobenzene	U			10.0	"	"	"	"	"	
1,2,3-Trichloropropane	U			10.0	"	"	"	"	"	
n-Propylbenzene	28.2			10.0	"	"	"	"	"	
2-Chlorotoluene	U			10.0	"	"	"	"	"	
1,3,5-Trimethylbenzene	34.8			10.0	"	"	"	"	"	
4-Chlorotoluene	U			10.0	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	U			10.0	"	"	"	"	"	
tert-Butylbenzene	U			10.0	"	"	"	"	"	

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



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Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Oct-23-20 13:16

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-200910 (2009007-11RE2)	Matr	ix: Water	Sampl	ed: Sep-10	-20 08:45	Received:	ved: Sep-11-20 10:10		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,4-Trimethylbenzene	113			10.0	ug/L	5	B20I014	Sep-15-20	Sep-15-20
sec-Butylbenzene	12.0			10.0	"	"	"	"	"
1,3-Dichlorobenzene	U			10.0	"	"	"	"	"
p-Isopropyltoluene	U			10.0	"	"	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	U			10.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	"	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"
Naphthalene	U			10.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			10.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.82			97.6%		73-124	"	"	"
1,2-Dichloroethane-d4	10.4			103%		84-122	"	"	"
Toluene-d8	9.57			95.7%		88-108	"	"	"
4-Bromofluorobenzene	10.1			101%		84-108	"	"	"

Report Name: 2009006,2009007 VOA - 8260 FINAL Oct 23 20 1316



# **Techlaw Document Controlled Number: 83139-1-23-612-DV-0016**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V SUPERFUND AND EMERGENCY MANAGEMENT DIVISION

DATE:				
SUBJECT:	Review of Data Received for Review	on: <u>January 11, 2021</u>		
FROM:	,	chLaw Consultants, Inc nental Services Assista		AT)
THROUGH:		cracting Officer's Repr	esentative	
TO:	Data User: Contact Person: Email address:	CDM Smith  John Grabs  grabsjc@cdmsmith.co	o <u>m</u>	
Stage_2B_Va	llidation_Electronic_	And_Manual (S2BVE	EM) Data Revi	ew Narrative
We have revie	ewed the data for the fo	ollowing case:		
SITE Name:	Southeast Rock	ford Groundwater, Are	ea 11 (IL)	
Case No: <u>492</u>	238 MA N	o:	SDG No:	<u>E3YH7</u>
Number and T	Type of Samples:	11 waters (SVOA SII	<u>M)</u>	
Sample Numb	oers: <u>E3YH1 – E3YH</u> ;	5, E3YH7 – E3YH9, E	3YJ0 – E3YJ2	
Laboratory:	Pace Analytical Serv	ices, LLC	Hrs. for Revie	ew:
Following are	our findings:			

Page 2 of 6
Case No: 49238
Site Name: Southeast Rockford Groundwater, Area 11 (IL)
Laboratory: Pace (EQI)

### Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Eleven (11) preserved water samples labeled E3YH1 through E3YH5, E3YH7 through E3YH9, and E3YJ0 through E3YJ2, were shipped to Pace Analytical Services LLC (EQI) located in West Columbia, SC. The samples were collected 12/01-02/2020 and received 12/02/2020 and 12/03/2020 intact. Four (4) samples; E3YH7, E3YJ0, E3YJ1 and E3YJ2, were received at the elevated temperature of 6.1°C. The remaining samples arrived properly cooled between 2.6°C and 4.1°C. All samples were analyzed according to CLP SOW SOM02.4, [Oct 2016] (and MA: 3054.0 – 1,4-Dioxane Analysis with Lower CRQL) and reviewed according to the QAPP, the September 2017 NFG for SOM02.4 (EPA-540-R-2017-002) and the Region 5 Organic CLP Validation SOP, DCN/SOP 83074-8-33-601-SO-1143.

Sample E3YH9 was designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses.

Sample E3YJ2 was identified as a field blank. Sample E3YH1 was identified as a field duplicate of sample E3YH2.

The sample results have been reviewed for compliance with the QAPP worksheets and all non-compliance are described in Section 17. – QAPP Compliance

'Only outliers and non-compliances are discussed in the narrative'.

Reviewed by: Allison Harvey / Techlaw-ESAT

Page 3 of 6
Case No: 49238
Site Name: Southeast Rockford Groundwater, Area 11 (IL)
Laboratory: Pace (EQI)

#### 1. PRESERVATION AND HOLDING TIMES

NONE FOUND.

#### 2. GC/MS and GC/ECD INSTRUMENT PERFORMANCE CHECK

NONE FOUND.

#### 3. INITIAL CALIBRATION

NONE FOUND.

#### 4. INITIAL CALIBRATION VERIFICATION

NONE FOUND.

#### 5. CONTINUING CALIBRATION

NONE FOUND.

#### 6. BLANKS

NONE FOUND.

#### 7. DEUTERATED MONITORING COMPOUNDS / SURROGATES

NONE FOUND.

#### 8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The following samples reported percent recovery below the QC criteria specified in MA: 3054.0 (15-120 %R). Detects in the unspiked sample, E3HY9(DL) is qualified as estimated J.

E3YH9MSD 1,4-Dioxane

The relative percent difference (RPD) between the following samples is outside the QC criteria specified in MA: 3054.0 (0-50 RPD). Detects in the unspiked sample, E3YH9(DL) is qualified as estimated J.

E3YH9MS, E3YH9MSD 1,4-Dioxane

#### 9. CLEANUP PROCEDURES

Reviewed by: Allison Harvey / Techlaw-ESAT

Page 4 of 6
Case No: 49238
Site Name: Southeast Rockford Groundwater, Area 11 (IL)
Laboratory: Pace (EQI)

NONE FOUND.

#### 10. LABORATORY CONTROL SAMPLE

NONE FOUND.

#### 11. INTERNAL STANDARD

NONE FOUND.

#### 12. TARGET ANALYTE QUANTITATION LIMIT

#### Method - Semivolatiles by SIM

**EXES-790** 

The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

E3YH2, E3YH3 1,4-Dioxane

#### 13. TENTATIVELY IDENTIFIED COMPOUNDS

Not Validated for this Stage of Review.

#### 14. SYSTEM PERFORMANCE

NONE FOUND.

#### 15. FIELD QC SAMPLES

Review not required under specified validation stage.

#### 16. SAMPLE RESULTS

The following samples reported analyte concentrations above the calibration range. No dilutions were performed as these samples are QC samples. Detects are qualified as estimated J.

E3YH9MS, E3YH9MSD 1,4-Dioxane

#### 17. QAPP COMPLIANCE

The analytical package fulfilled the QAPP QC components requirements identified in the Southeast Rockford GW QAPP – Area 11.

Reviewed by: Allison Harvey / Techlaw-ESAT

Page 5 of 6
Case No: 49238
Site Name: Southeast Rockford Groundwater, Area 11 (IL)
Laboratory: Pace (EQI)

The raw data package was missing the Form 3 for QC sample SLCS76.

Reviewed by: Allison Harvey / Techlaw-ESAT

Page 6 of 6
Case No: 49238
Site Name: Southeast Rockford Groundwater, Area 11 (IL)
Laboratory: Pace (EQI)

#### Validation Data Qualifier Sheet

<u>Qualifiers</u>	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the results may be biased high.
J-	The result is an estimated quantity, but the results may be biased low.
NJ	The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
С	The Target Pesticide or Aroclor analyte identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).
X	The Target Pesticide or Aroclor analyte identification was not confirmed when GC/MS analysis was performed.

Reviewed by: Allison Harvey / Techlaw-ESAT

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH1 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-MW007 pH: 8 Sample Date: 12/02/2020 Sample Time: 10:50:00

% Moisture: % Solids: 0.0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1.4-Dioxane	Target	0.19	IJ	ησ/Ι.	0.19	IJ	1.0	YES	S2BVEM

Page 1

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH2 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-MW007 pH: 8 Sample Date: 12/02/2020 Sample Time: 10:50:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	0.069	J	ug/L	0.069	J	1.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH3 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

 Sample Location: A11-MW004A
 pH: 8
 Sample Date: 12/02/2020
 Sample Time: 15:00:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1.4-Dioxane	Target	0.15	T	110/I	0.15	Ĭ	1.0	VFS	S2RVFM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH4 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-MW003 pH: 8 Sample Date: 12/02/2020 Sample Time: 08:45:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	4.6		ug/L	4.6	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH5 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-MW002 pH: 8 Sample Date: 12/02/2020 Sample Time: 13:10:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	1.1		ug/L	1.1	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH7 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

 Sample Location: A11-MW130A
 pH: 8
 Sample Date: 12/01/2020
 Sample Time: 09:35:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1 4-Dioxane	Target	4.0		ησ/Ι.	4.0	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH8 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

 Sample Location: A11-MW006
 pH: 8
 Sample Date: 12/01/2020
 Sample Time: 12:11:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	4.1		ug/L	4.1	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH9 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

 Sample Location: A11-MW005
 pH: 8
 Sample Date: 12/01/2020
 Sample Time: 13:50:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	4.5	J	ug/L	4.5	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH9MS Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: pH: 8 Sample Date: 12/01/2020 Sample Time: 13:50:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Spike	5.6	J	ug/L	5.6	Е	1.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YH9MSD Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: pH: 8 Sample Date: 12/01/2020 Sample Time: 13:50:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Spike	4.5	J	ug/L	4.5	Е	1.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YJ0 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

 Sample Location: A11-MW004B
 pH: 8
 Sample Date: 12/01/2020
 Sample Time: 16:45:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	6.3		ug/L	6.3	D	5.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YJ1 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-MW001 pH: 8 Sample Date: 12/01/2020 Sample Time: 15:31:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	5.0		ug/L	5.0	D	2.0	YES	S2BVEM

Project Name: SOUTHEAST ROCKFORD GroupID: 49238/EPW14035/E3YH7 Lab Name: Pace Analytical Services, LLC GROUND WATER CONTAMINATION Project

Sample Number: E3YJ2 Method: Semivolatiles by SIM Matrix: Water MA Number: 3054.0

Sample Location: A11-FB001 pH: 8 Sample Date: 12/01/2020 Sample Time: 17:05:00

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	0.19	U	ug/L	0.19	U	1.0	YES	S2BVEM

## Southeast Rockford Area 11 - Groundwater Samples

		Data V	alidation Report	ater oumpies			
Sample Delivery Group	(SDG) Number:	2012	003				
Laboratory:	(	ESAT - US EPA Regi	on 5 LSASD Analyti	<del>_</del> ical Services B	ranch	_	
Matrix: Collection date: Analysis/Methods:		Groundwater 12/01/20  Wet Chemistry:	Anions - EPA 300.0				
	Sample Number A11-MW130A-201201 A11-MW006-201201 A11-MW005-201201 A11-MW004B-201201 A11-MW001-201201 A11-FB001-201201  performed in accordance with tw (EPA January 2017).	he specific analytical me	ethods and the Nati	onal Functiona	l Guidelines f	or Inorganic Superfund	
Were the Matrix Spike D		) ≤30% (aqueous)?	Parameters (Anion	<u>s 300.0)</u>			Yes No N/A N/A N/A N/A Yes
Field Duplicates N/A		<u>Sample</u>	<u>Duplicate</u>	<u>%RPD</u>	Qualifiers	Associated Samples	
MS/MSD N/A		%RPD	<u>Limit</u>		Qualifiers	Associated Samples	
LCS/LCSD N/A		<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Duplica E20L003-DUP1	te	<u>%RPD</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Control Samp Were the Laboratory Me Were the Field Blanks re Was the ICAL criteria me Was the CCV criteria me Was the Tuning criteria me Were the Surrogate % re	thod Blank results all < RL? esults all < RL? et? et? met? ecoveries within laboratory dete ard areas within ± 50 - 150%?		laboratory determin	ned control lim	its)		Yes No N/A Yes Yes Yes Yes Yes Yes N/A N/A
Blanks E20L003-BLK1 Nitrogen, Nitrate		Concentration  Nondetect	MDL /PQL		Qualifiers	Associated Samples	

Nondetect

Sulfate

ICB/CCB ICB	Nitrogen, Nitrate Sulfate	Concentration Nondetect 0.03	MDL / PQL 0.10 / 0.12		<u>Qualifiers</u>	<u>Associated Samples</u>	
CCB1	Nitrogen, Nitrate Sulfate	Nondetect 0.03	0.10 / 0.12		None	Sample results nondeted	ct or > RL
Field Blank A11-FB001-201201		Concentration Nondetect	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
<b>MS/MSD</b> E20L003-MS1		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
Nitrogen, Nitrate Sulfate		Acceptable 68%	80-120 80-120		J-/UJ	All samples	
LCS/LCSD E20L003-BS1		<u>%R</u>	<u>Limits</u>		Qualifiers	<u>Associated Samples</u>	
Nitrogen, Nitrate Sulfate		Acceptable Acceptable	90-110 90-110				
ICV	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
ccv	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	<u>Qualifiers</u>	Associated Samples	
MRL Check B20L003-MRL1 Nitrogen, Nitrate Sulfate			%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper <u>Limit</u>		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures a Were holding times met? Was preservation criteria me Were Chain-of-Custody reco Comments (note deviations)	et? (0° C - 6° C) ords complete and provided						Yes No N/A Yes Yes Yes No
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	

Comparability:	Yes No N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes
Comments (note deviations):	
Completeness (90%):	Yes No N/A
Are all data in this SDG usable?	Yes
Comments (note deviations):	
Sensitivity:	Yes No N/A
Are MDLs present and reported?	Yes
Do the reporting limits meet project requirements?	Yes
Comments (note deviations):	
Comment:	
Data is usable with appropriate qualifiers applied.	

Date: 1/19/2021

Date: 1/25/2021

Kristine Molloy

Cherie Zakowski

Data Validator:

Data Reviewer:



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Nov-09-20 15:25

# Anions by Ion Chromatography, EPA 300.0 (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-200910 (2009007-01)	Matrix: Wa	ater	Sampled: S	Sep-10-20 1	3:05	05 Received: Sep-11-20 10:10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	U			0.12	mg/L	1	B20I013	Sep-11-20	Sep-11-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW007-200910 (2009007-02)		Matrix: W	ater	Sampled: S	Sep-10-20 1	0:55	Received: Sep-	-11-20 10:10	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	2.96			0.12	mg/L	1	B20I013	Sep-11-20	Sep-11-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW004A-200910 (2009007-03)		Matrix: V	Matrix: Water Sampled: Sep-10-20 15:50 Received: Sep-11-20 10:10					)		
	Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
	Sulfate as SO4	33.4			0.12	mg/L	1	B20I013	Sep-11-20	Sep-11-20
	Nitrate - NO3	1.93			0.12	"	"	"	"	"

A11-MW007-200910-D (2009007-04)	IW007-200910-D (2009007-04)			fatrix: Water Sampled: Sep-10-20 10:55 Received: Sep-11-20					
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	2.93			0.12	mg/L	1	B20I013	Sep-11-20	Sep-11-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW003-200910-D (2009007-05)		Matrix:	Water	Sampled	: Sep-10-2	0 08:45	Received: S	ep-11-20 10:1	.0
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	11.3			0.12	mg/L	1	B20I013	Sep-11-20	Sep-11-20
Nitrate - NO3	U			0.12	"	"	"	"	"

Report Name: 2009007 Anions by IC FINAL Nov 09 20 1525



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Nov-09-20 15:25

#### **Notes and Definitions**

U Not Detected NR Not Reported

Q QC limit Exceeded

### Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

		Data	Validation Report				
Sample Delivery Group (SDG) Num	ber:	20	12005				
Laboratory:			egion 5 LSASD Analytic	<b>-</b> cal Services Br	anch		
Matrix: Collection date: Analysis/Methods:		Groundwater 12/02/20 Wet Chemistry:	Anions - EPA 300.0			-	
2012005-01 A11-M 2012005-02 A11-M 2012005-03 A11-M 2012005-04 A11-M		e specific analytical	methods and the Natio	onal Functional	Guidelines f	or Inorganic Superfund	
		Wet Chemistr	y Parameters (Anions	300.0)			
Precision: Are the field duplicate relative percent Were the Matrix Spike Duplicate RPD Laboratory Control Spike Duplicates F Laboratory Duplicate RPDs within lim Comments (note deviations):	os ≤ 20%? (Or lab o RPD within limits?	≤30% (aqueous)?					Yes No N/A Yes N/A N/A Yes
Field Duplicates		<u>Sample</u> A11-MW007- 201201	<u>Duplicate</u> A11-MW007-201201 D	%RPD - Acceptable	Qualifiers	Associated Samples	
MS/MSD N/A		%RPD	<u>Limit</u>		Qualifiers	Associated Samples	
LCS/LCSD N/A		%RPD	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Duplicate E20L006-DUP1		%RPD Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
Accuracy: Was the Matrix Spike/Matrix Spike Du Laboratory Control Sample criteria me Were the Laboratory Method Blank re Were the Field Blanks results all < RL Was the ICAL criteria met? Was the CCV criteria met? Was the Tuning criteria met? Were the Surrogate % recoveries with Were the Internal Standard areas with Comments (note deviations):	et? esults all < RL? .? nin laboratory deter		·	ed control limit	s)		Yes No N/A Yes Yes Yes N/A Yes Yes N/A N/A N/A
Blanks E20L006-BLK1		Concentration	MDL /PQL		Qualifiers	Associated Samples	

Nondetect

Nondetect

Nitrogen, Nitrate

Sulfate

ICB/CCB ICB	Nitrogen, Nitrate	Concentration Nondetect	MDL / PQL		<u>Qualifiers</u>	Associated Samples	
	Sulfate	0.03	0.1 / 0.12		None	Sample results > RL	
CCB1	Nitrogen, Nitrate Sulfate	Nondetect 0.03	0.1 / 0.12		None	Sample results > RL	
Field Blank N/A		Concentration	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
<b>MS/MSD</b> E20L006-MS1		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
Nitrogen, Nitrate Sulfate		Acceptable Acceptable	80-120 80-120				
LCS/LCSD E20L006-BS1		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Nitrogen, Nitrate Sulfate		Acceptable Acceptable	90-110 90-110				
ICV	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
ccv	Nitrogen, Nitrate Sulfate		<u>%R</u> Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
MRL Check B20L006-MRL1 Nitrogen, Nitrate Sulfate			%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures a Were holding times met? Was preservation criteria me Were Chain-of-Custody reco Comments (note deviations)	et? (0° C - 6° C) ords complete and provide						Yes No N/A Yes Yes Yes No
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	

Comparability:	Yes No N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes
Comments (note deviations):	
Completeness (90%):	Yes No N/A
Are all data in this SDG usable?	Yes
Comments (note deviations):	
Sensitivity:	Yes No N/A
Are MDLs present and reported?	Yes
Do the reporting limits meet project requirements?	Yes
Comments (note deviations):	
Comment:	
Data is usable as reported.	

Date: 1/20/2021

Date: 1/23/2021

Kristine Molloy

Cherie Zakowski

Data Validator:

Data Reviewer:



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-07-20 16:18

# Anions by Ion Chromatography, EPA 300.0 (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW130A-201201 (2012003-01)		Matrix: \	Water	Sampled:	Dec-01-20	09:35	Received: Do	ec-02-20 11:3	4
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	17.3			0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	6.26			0.12	"	"	"	"	"

A11-MW006-201201 (2012003-02)		Matrix: Wa	ater	Sampled: I	ec-01-20 1	2:11	Received: Dec-	-02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	5.56			0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	U		-	0.12	"	"	"	"	"

A11-MW005-201201 (2012003-03)		Matrix: W	ater	Sampled: I	Dec-01-20 1	13:50	Received: Dec	-02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	33.7	(MS), L		0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	14.1			0.12	"	"	"	"	"

A11-MW004B-201201 (2012003-04)		Matrix: V	Water	Sampled:	Dec-01-20	16:45	Received: Do	1	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	18.9			0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	5.15			0.12	"	"	"	"	"

A11-MW001-201201 (2012003-05)		Matrix: W	ater	Sampled: I	Dec-01-20 (	5:31	Received: Dec	-02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	30.4			0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	11.4			0.12	"	"	"	"	"

A11-FB001-201201 (2012003-06)		Matrix: Wat	er	Sampled: De	ec-01-20 17:	01 Rec	eived: Dec-(	02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	U			0.12	mg/L	1	B20L003	Dec-02-20	Dec-02-20
Nitrate - NO3	U			0.12	"	"	"	"	"

Report Name: 2012003 Anions by IC FINAL Dec 07 20 1618



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-07-20 16:18

#### **Notes and Definitions**

L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater

than the reported value.

(MS) Matrix spike recovery criteria not met for this analyte

U Not Detected NR Not Reported

Q QC limit Exceeded

Report Name: 2012003 Anions by IC FINAL Dec 07 20 1618

### Southeast Rockford Area 11 - Groundwater Samples

**Data Validation Report** Sample Delivery Group (SDG) Number: 20012003 2012005 ESAT - US EPA Region 5 LSASD Analytical Services Branch Laboratory: Matrix: Groundwater Collection date: 12/01/2020 & 12/02/2020 Analysis/Methods: Wet Chemistry: Alkalinity M2320 B Samples in SDG: Lab ID Sample Number Lab ID Sample Number 2012003-01 A11-MW130A-201201 2012005-01 A11-MW007-201201-D 2012003-02 A11-MW006-201201 2012005-02 A11-MW007-201201 2012003-03 A11-MW005-201201 2012005-03 A11-MW004A-201201 2012003-04 A11-MW004B-201201 2012005-04 A11-MW003-201201 2012003-05 A11-MW001-201201 2012005-05 A11-MW002-201201 2012003-06 A11-FB001-201201 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017). Wet Chemistry Parameters (Alkalinity 2320B) Precision: Yes No N/A Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Yes Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) N/A N/A Laboratory Control Spike Duplicates RPD within limits? Laboratory Duplicate RPDs within limits? Yes Comments (note deviations): %RPD Field Sample **Duplicate Qualifiers** Associated Samples **Duplicates** A11-MW007-A11-MW007-201201-201201 D Acceptable MS/MSD %RPD **Limit Qualifiers Associated Samples** N/A LCS/LCSD %RPD **Limits Qualifiers** Associated Samples N/A **Laboratory Duplicate** %RPD **Qualifiers** Associated Samples **Limits** B20L009-DUP1 Acceptable Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) N/A Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? Yes Was the ICAL criteria met? N/A Was the CCV criteria met? N/A Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? N/A Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations):

MDL /PQL

**Qualifiers** Associated Samples

Concentration

Nondetect

Blanks

B20L009-BLK1

Field Blank A11-FB001-201201		Concentration Nondetect	MDL / PQL		Qualifiers	<u>Associated Samples</u>		
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples		
MS/MSD N/A		<u>%R</u>	<u>Limits (%)</u>		Qualifiers	Associated Samples		
LCS/LCSD B20L009-SRM1		<u>%R</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples		
ICV N/A			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples		
CCV N/A			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples		
Tune N/A								
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples		
Representativeness: Were sampling procedures an Were holding times met? Was preservation criteria met? Were Chain-of-Custody record Comments (note deviations):	? (0° C - 6° C) ds complete and provided in						Yes No N/A Yes Yes Yes No	
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples		
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples		
Comparability: Were analytical procedures ar Comments (note deviations):	nd methods followed as defi	ned in the QAPP or fi	eld change documen	tation?			Yes No N/A Yes	
Completeness (90%): Are all data in this SDG usable Comments (note deviations):							Yes No N/A Yes	
Sensitivity: Are MDLs present and reporte Do the reporting limits meet pr Comments (note deviations):	oject requirements?						Yes No N/A Yes Yes	
Comment:  Data is usable as reported	l.							
Data Validator:	Kristine M			1/20/2021/				
Data Reviewer:	Cherie Zako	DWSKI	Date:	Date: 1/23/2021				



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-18-20 12:33

### Alkalinity by SM 2320B US EPA Region 5 LSASD Analytical Services Branch

A11-MW130A-201201 (2012003-01)		Matrix	: Water	Sample	d: Dec-01-20	09:35	Received: D	ec-02-20 11:34	1	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	350			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW006-201201 (2012003-02)		Matrix: V	Water	Sampled	Dec-01-20 12	2:11 F	Received: Dec	-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	450			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW005-201201 (2012003-03)		Matrix: V	Water	Sampled	Dec-01-20 13	3:50 I	Received: Dec	-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	380			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW004B-201201 (2012003-04)		Matrix: Water Sampled: Dec-01-20 16:45					Received: De	Dec-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	340			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW001-201201 (2012003-05)		Matrix: V	Water	Sampled	Dec-01-20 05	5:31 F	Received: Dec	-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	350			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-FB001-201201 (2012003-06)		Matrix: W	ater	Sampled: 1	Dec-01-20 17:	01 Re	eceived: Dec-(	02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	U			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW007-201201-D (2012005-01)		Matrix	x: Water	Sample	ed: Dec-02-20	10:50	Received: I	Dec-03-20 10:5	37	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	540			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	
A11-MW007-201201 (2012005-02)		Matrix: V	Water	Sampled	Dec-02-20 10	):50 I	Received: Dec	-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	540			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	

Report Name: 2012003,2012005 Alkalinity pH FINAL Dec 18 20 1233



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-18-20 12:33

### Alkalinity by SM 2320B US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-201201 (2012005-03)		Matrix: Water		Sampled: Dec-02-20 15:00			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Total Alkalinity	330			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20

A11-MW003-201201 (2012005-04)		Matrix: V	Matrix: Water		Sampled: Dec-02-20 08:45			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	390			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	

A11-MW002-201201 (2012005-05)		Matrix: V	Matrix: Water		Sampled: Dec-02-20 13:10			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Total Alkalinity	440			20	mg CaCO3/L	1	B20L009	Dec-09-20	Dec-09-20	

Report Name: 2012003,2012005 Alkalinity pH FINAL Dec 18 20 1233



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-18-20 12:33

#### **Notes and Definitions**

\* This Quality Control measure meets the requirements of the CRL SOP for this analyte.

U Not Detected NR Not Reported

Q QC limit Exceeded

## Southeast Rockford Area 11 - Groundwater Samples

		Data V	alidation Report	ater oumpies			
Sample Delivery Group	(SDG) Number:	2012	003				
Laboratory:	(	ESAT - US EPA Regi	on 5 LSASD Analyti	<del>_</del> ical Services B	ranch	_	
Matrix: Collection date: Analysis/Methods:		Groundwater 12/01/20  Wet Chemistry:	Anions - EPA 300.0				
	Sample Number A11-MW130A-201201 A11-MW006-201201 A11-MW005-201201 A11-MW004B-201201 A11-MW001-201201 A11-FB001-201201  performed in accordance with tw (EPA January 2017).	he specific analytical me	ethods and the Nati	onal Functiona	l Guidelines f	or Inorganic Superfund	
Were the Matrix Spike D		) ≤30% (aqueous)?	Parameters (Anion	<u>s 300.0)</u>			Yes No N/A N/A N/A N/A Yes
Field Duplicates N/A		<u>Sample</u>	<u>Duplicate</u>	<u>%RPD</u>	Qualifiers	Associated Samples	
MS/MSD N/A		%RPD	<u>Limit</u>		Qualifiers	Associated Samples	
LCS/LCSD N/A		<u>%RPD</u>	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Duplica E20L003-DUP1	te	<u>%RPD</u> Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
Laboratory Control Samp Were the Laboratory Me Were the Field Blanks re Was the ICAL criteria me Was the CCV criteria me Was the Tuning criteria me Were the Surrogate % re	thod Blank results all < RL? esults all < RL? et? et? met? ecoveries within laboratory dete ard areas within ± 50 - 150%?		laboratory determin	ned control lim	its)		Yes No N/A Yes Yes Yes Yes Yes Yes N/A N/A
Blanks E20L003-BLK1 Nitrogen, Nitrate		Concentration  Nondetect	MDL /PQL		Qualifiers	Associated Samples	

Nondetect

Sulfate

ICB/CCB ICB	Nitrogen, Nitrate Sulfate	Concentration Nondetect 0.03	MDL / PQL 0.10 / 0.12		<u>Qualifiers</u>	<u>Associated Samples</u>	
CCB1	Nitrogen, Nitrate Sulfate	Nondetect 0.03	0.10 / 0.12		None	Sample results nondeted	ct or > RL
Field Blank A11-FB001-201201		Concentration Nondetect	MDL / PQL		Qualifiers	Associated Samples	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
<b>MS/MSD</b> E20L003-MS1		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
Nitrogen, Nitrate Sulfate		Acceptable 68%	80-120 80-120		J-/UJ	All samples	
LCS/LCSD E20L003-BS1		<u>%R</u>	<u>Limits</u>		Qualifiers	<u>Associated Samples</u>	
Nitrogen, Nitrate Sulfate		Acceptable Acceptable	90-110 90-110				
ICV	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
ccv	Nitrogen, Nitrate Sulfate		%R Acceptable Acceptable	<u>Limits</u>	<u>Qualifiers</u>	Associated Samples	
MRL Check B20L003-MRL1 Nitrogen, Nitrate Sulfate			%R Acceptable Acceptable	<u>Limits</u>	Qualifiers	Associated Samples	
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper <u>Limit</u>		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures a Were holding times met? Was preservation criteria me Were Chain-of-Custody reco Comments (note deviations)	et? (0° C - 6° C) ords complete and provided						Yes No N/A Yes Yes Yes No
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	

Comparability:	Yes No N/A
Were analytical procedures and methods followed as defined in the QAPP or field change documentation?	Yes
Comments (note deviations):	
Completeness (90%):	Yes No N/A
Are all data in this SDG usable?	Yes
Comments (note deviations):	
Sensitivity:	Yes No N/A
Are MDLs present and reported?	Yes
Do the reporting limits meet project requirements?	Yes
Comments (note deviations):	
Comment:	
Data is usable with appropriate qualifiers applied.	

Date: 1/19/2021

Date: 1/25/2021

Kristine Molloy

Cherie Zakowski

Data Validator:

Data Reviewer:



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-07-20 16:52

# Anions by Ion Chromatography, EPA 300.0 (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-201201-D (2012005-01)		Matrix:	Water	Sampled: Dec-02-20 10:50			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	2.56			0.12	mg/L	1	B20L006	Dec-03-20	Dec-03-20
Nitrate - NO3	U			0.12	"	"	"	"	"

A11-MW007-201201 (2012005-02)			Matrix: Wa	ater	Sampled: Dec-02-20 10:50			Received: Dec		
	Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
	Sulfate as SO4	2.45			0.12	mg/L	1	B20L006	Dec-03-20	Dec-03-20
	Nitrate - NO3	U		-	0.12	"	"	"	"	"

A11-MW004A-201201 (2012005-03)		Matrix: Water		Sampled: Dec-02-20 15:00			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	42.9			0.12	mg/L	1	B20L006	Dec-03-20	Dec-03-20
Nitrate - NO3	1.66			0.12	"	"	"	"	"

A11-MW003-201201 (2012005-04)		Matrix: W	Matrix: Water		Sampled: Dec-02-20 08:45			Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Sulfate as SO4	8.52			0.12	mg/L	1	B20L006	Dec-03-20	Dec-03-20	
Nitrate - NO3	U			0.12	"	"	"	"	"	

A11-MW002-201201 (2012005-05)		Matrix: Water		Sampled: Dec-02-20 13:10			Received: Dec		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Sulfate as SO4	1.09			0.12	mg/L	1	B20L006	Dec-03-20	Dec-03-20
Nitrate - NO3	U			0.12	"	"	"	"	"

Report Name: 2012005 Anions by IC FINAL Dec 07 20 1652



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Dec-07-20 16:52

#### **Notes and Definitions**

U Not Detected NR Not Reported

Q QC limit Exceeded

Report Name: 2012005 Anions by IC FINAL Dec 07 20 1652

## Southeast Rockford Area 11 - Groundwater Samples Data Validation Report

Sample Delivery Group (SDG) Number:

2012003, 2012005

ESAT - US EPA Region 5 LSASD Analytical Services Branch

Matrix: Groundwater

Collection date: 12/01/2020 & 12/02/2020

Analysis/Methods:

Volatile Organic Compounds (VOCs) 8260

Samples in SDG:

Laboratory:

<u>Lab ID</u>	Sample Number	Lab ID	Sample Number
2012003-01RE1	A11-MW130A-201201	2012005-01RE1	A11-MW007-201201-D
2012003-02RE1	A11-MW006-201201	2012005-02RE1	A11-MW007-201201
2012003-03RE1	A11-MW005-201201	2012005-03RE2	A11-MW004A-201201
2012003-04RE1	A11-MW004B-201201	2012005-04RE1	A11-MW003-201201
2012003-05RE1	A11-MW001-201201	2012005-05RE2	A11-MW002-201201
2012003-06	A11-FB001-201201	2012005-06RE1	A11-TB002-201201
2012003-07	A11-TB001-201201		

Data validation was performed in accordance with the specific analytical method and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017).

#### Volatile Organic Compounds 8260 / 1,4-Dioxane 8000D

Yes No N/A

No

Yes

Nο

N/A

Precision:

Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)?

Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits)

Laboratory Control Spike Duplicates RPD within limits?

Laboratory Duplicate RPDs within limits?

Comments (note deviations):

Field Duplicates		<u>Sample</u> A11-MW007- 201201	<u>Duplicate</u> A11-MW007- 201201-D	<u>%RPD</u>	<u>Qualifiers</u>	Associated Samples
	Isopropylbenzene	109	486	127%	J	
	n-Propylbenzene	104	454	125%	J	
	sec-Butylbenzene	17.5	68.4	74%	J	A44 MINORT 004004 S
	1,3,5-Trimethylbenzene	14.4	56.7	NC	J*	A11-MW007-201201 & A11-MW007-201201-D
	Benzene	10 U	44.3	NC	J / UJ*	A11-WW007-201201-D
	Naphthalene	34	97.3	NC	J*	
	n-Butylbenzene	19.9	66.9	NC	J*	
	1,2,4-Trimethylbenzene	131	169	NC	None	Sample results < 5xs RL; ABS Diff. < RL

\* Sample results < 5xs RL; ABS Diff. > RL

MS/MSD B20L005-MS1 / MSD1 (2012003-03RE1)		<u>%RPD</u> Acceptable	<u>Limit</u>	<u>Qualifiers</u>	Associated Samples
LCS/LCSD B20L004-BS1 / BSD1	Acetone	<u>%RPD</u> 23.5	<u>Limits</u> 20%	<u>Qualifiers</u> J**	<u>Associated Samples</u> 2012003-06, 2012003-07
B20L005-BS1 / BSD1	2,2-Dichloropropane	23.7	20%	J**	2012003-01RE1 through 2012003-05RE1
B20L008-BS1 / BSD1		Acceptable			
B20L008-BS2 / BSD2	2,2-Dichloropropane	57.8	20%	J**	2012005-03RE2, 2012005-05RE2
	***			1.6.6.000	

\*\*Qualification required for detected results only - associated results nondetect - no qualification required

 Laboratory Duplicate
 %RPD
 Limits
 Qualifiers
 Associated Samples

 N/A

Accuracy: Was the Matrix Spike/Matrix	Snike Dunlicate criteria	met? (frequency > 5%	and laboratory dete	ermined contro	al limits)	_	Yes No N/A Yes
Laboratory Control Sample of Were the Laboratory Method Were the Field Blanks result	riteria met? l Blank results all < RL?	mor: (moquemby 2 370	and laboratory dete	Simmed COMIC			No Yes Yes
Was the ICAL criteria met?							Yes
Was the CCV criteria met?							Yes
Was the Tuning criteria met?							Yes
Were the Surrogate % recov Were the Internal Standard			IS?				Yes Yes
Comments (note deviations)		ŗ					res
Blanks		Concentration	MDL /PQL		Qualifiers	Associated Samples	
B20L004-BLK1		Nondetect					
B20L004-BLK2		Nondetect					
B20L005-BLK1		Nondetect Nondetect					
B20L005-BLK2 B20L008-BLK1		Nondetect					
B20L008-BLK1		Nondetect					
BZULUUO-BLKZ		Nondetect					
Field Blank		Concentration	MDL / PQL		Qualifiers	Associated Samples	
A11-FB001-201201		Nondetect					
A11-TB001-201201		Nondetect					
A11-TB001-201201		Nondetect					
Surrogates		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
		Acceptable					
MS/MSD		<u>%R</u>	Limits (%)		Qualifiers	Associated Samples	
B20L005-MS1 / MSD1 (2012003-03RE1)		Acceptable					
LCS/LCSD		<u>%R</u>	<u>Limits</u>		Qualifiers	Associated Samples	
B20L004-BS1 / BSD1		Acceptable					
B20L005-BS1 / BSD1		Acceptable					
B20L005-BS2		Acceptable					
B20L008-BS1 / BSD1		Acceptable					
B20L008-BS2/ BSD2	2,2-Dichloropropane	71.5 / 39.5	70-130		J / UJ	2012005-03RE2, 20120	05-05RE2
ICAL		RRF	%RSD	<u>Limits</u>	Qualifiers	Associated Samples	
12/1/2020 11:44		Acceptable	Acceptable				
ICV / CCV		RRF	<u>%D</u>	<u>Limits</u>	Qualifiers	Associated Samples	
ICV 12/1/2020 3:28		Acceptable	Acceptable				
CCV							
12/2/2020 13:34		Acceptable	Acceptable				
12/2/2020 18:26		Acceptable	Acceptable				
12/3/2020 9:03		Acceptable	Acceptable				
12/3/2020 13:44		Acceptable	Acceptable				
12/3/2020 19:35		Acceptable	Acceptable				
12/4/2020 12:40		Acceptable	Acceptable				
12/4/2020 18:54		Acceptable	Acceptable				
12/5/2020 1:58		Acceptable	Acceptable				
12/5/2020 9:28		Acceptable	Acceptable				
		,	1				

MRL Check			<u>%R</u>	<u>Limits</u>	Qualifiers	Associated Samples	
B20L005-MRL1			Acceptable				
Tune Acceptable							
Internal Standards		<u>Area</u>	Area Lower / Upper Limit Acceptable		<u>Qualifiers</u>	Associated Samples	
Representativeness: Were sampling procedures and of Were holding times met? Was preservation criteria met? (() Were Chain-of-Custody records of Comments (note deviations): The	0° C - 6° C) complete and provi	ded in data package?				_	Yes No N/A Yes Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures and Comments (note deviations):	methods followed a	as defined in the QAPP	or field change docเ	umentation?		_	Yes No N/A Yes
Completeness (90%): Are all data in this SDG usable? Comments (note deviations):						-	Yes No N/A Yes
Sensitivity: Are MDLs present and reported? Do the reporting limits meet proje Comments (note deviations):						_	Yes No N/A Yes Yes
Comment:  As stated in the case narrative All other samples were proper	•	•		•	n 7 days of sa	ampling,	
As stated in the case narrative is reported at the lowest dilution						ch analyte	
As stated in the case narrative	e, no matrix spike w	as analyzed for the san	nples associated wit	th batch B2L00	08 due to insu	ufficient number of vials.	
Case narrative indicates co-el when detected above the repo		oncentration of n-butylb	enzene, n-Butylben	zene has beer	n flagged as a	an estimated concentratio	n (J)
Data is usable with appropriat	e qualifiers applied						
Data Validator:	Kristine 1	Molloy	Date:	5/3/2021			

Cherie Zakowski

Data Reviewer:

Date: 5/6/2021



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW130A-201201 (2012003-01RE1) Matrix: Water Sampled: Dec-01-20 09:35 Received: Dec-02-20 11:34

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	3.77			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	3.51			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
<b>Tetrachloroethene</b>	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW130A-201201 (2012003-01RE1)	Matrix: Water	Sampled: Dec-01-20 09:35	Received: Dec-02-20 11:34
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Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Chlorobenzene	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.57			95.1%		73-124	"	"	"
1,2-Dichloroethane-d4	10.2			101%		84-122	"	"	"
Toluene-d8	9.66			96.6%		88-108	"	"	"
4-Bromofluorobenzene	9.86			98.6%		84-108	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-201201 (2012003-02RE1)		Matı	rix: Water	Sampl	ed: Dec-01	-20 12:11	Received:	Received: Dec-02-20 11	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	2.82			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW006-201201 (2012003-02RE1)		Matı	rix: Water	Sampl	ed: Dec-0	1-20 12:11	Received: Dec-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	11	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.2	_		101%	_	73-124	"	"	"
1,2-Dichloroethane-d4	10.6			105%		84-122	"	"	"
Toluene-d8	9.95			99.5%		88-108	"	"	"
4-Bromofluorobenzene	10.2			102%		84-108	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### US EPA Region 5 LSASD Analytical Services Branch

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

## Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW005-201201 (2012003-03RE1) Matrix: Water Sampled: Dec-01-20 13:50 Received: Dec-02-20 11:34 Flags / Analyte Result Qualifiers MDL Dilution Batch Prepared Analyzed Limit Units Dichlorodifluoromethane U 2.00 ug/L B20L005 Dec-02-20 Dec-03-20 Chloromethane U 2.00 Vinyl chloride U 2.00 U 2.00 Bromomethane U Chloroethane Trichlorofluoromethane U 2.00 1,1-Dichloroethene U 2.00 U 12.5 Acetone U 2.00 Carbon disulfide Methylene chloride U 2.00 " U trans-1,2-Dichloroethene 2.00 1,1-Dichloroethane 7.01 2.00 2,2-Dichloropropane U 2.00 U 2.00 cis-1,2-Dichloroethene 2-Butanone U 12.5 " " Bromochloromethane U 2.00 2.00 Chloroform U 4.90 2.00 1,1,1-Trichloroethane U 2.00 Carbon tetrachloride U 2.00 1,1-Dichloropropene U 2.00 Benzene U 1,2-Dichloroethane 2.00 Trichloroethene U 2.00 1,2-Dichloropropane U 2.00 U 2.00 " Dibromomethane Bromodichloromethane U 2.00 U 2.00 cis-1,3-Dichloropropene U 5.00 4-Methyl-2-pentanone 2.00 Toluene trans-1,3-Dichloropropene U 2.00 " 1,1,2-Trichloroethane U 2.00 2.00 Tetrachloroethene U U 2.00 1,3-Dichloropropane 2-Hexanone 5.00 " U 2.00 Dibromochloromethane 1,2-Dibromoethane (EDB) U 2.00

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

22 of 2146 (Full Package)

2.00

U

Chlorobenzene



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Analyte	Result	Flags / Qualifiers	MDL	Reporting		Dilution	Batch	Duamanad	Analyzed
-		Quanners	MDL	Limit	Units			Prepared	
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
						%REC			
Surrogate	Result			%REC		Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.75			96.9%		73-124	"	"	"
1,2-Dichloroethane-d4	10.1			100%		84-122	"	"	"
Toluene-d8	10.1			101%		88-108	"	"	"
4-Bromofluorobenzene	9.55			95.5%		84-108	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



A11-MW004B-201201 (2012003-04RE1)

Tetrachloroethene

2-Hexanone

Chlorobenzene

1,3-Dichloropropane

Dibromochloromethane
1,2-Dibromoethane (EDB)

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Sampled: Dec-01-20 16:45

Received: Dec-02-20 11:34

Matrix: Water

Analyte	Result	Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	5.67			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	5.61			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

24 of 2146 (Full Package)

2.00

2.00

5.00

2.00

2.00

2.00

U

U

U

U

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U



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004B-201201 (2012003-04RE1)	Matrix: Water	Sampled: Dec-01-20 16:45	Received: Dec-02-20 11:34
	Elega /		

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result		_	%REC	_	%REC	Batch	Prepared	Analyzed
Dibromofluoromethane	9.88			98.2%		73-124	"	"	"
1,2-Dichloroethane-d4	10.2			101%		84-122	"	"	"
Toluene-d8	9.87			98.7%		88-108	"	"	"
							"	"	"
4-Bromofluorobenzene	9.68			96.8%		84-108	"	"	,,

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW001-201201 (2012003-05RE1)		Matı	rix: Water	Sampl	ed: Dec-01	-20 05:31	Received:	Dec-02-20 11	1:34
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	4.94			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	n .	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	n .	"	"	"
Chloroform	U			2.00	"	n .	"	"	"
1,1,1-Trichloroethane	9.02			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	n .	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	2.15			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	,,	,,	,,	,,

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



A11-MW001-201201 (2012003-05RE1)

Analyte

Naphthalene

1,2,3-Trichlorobenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Reporting

Limit

Matrix: Water

MDL

Flags /

Qualifiers

Result

U

U

Sampled: Dec-01-20 05:31

Units

Dilution

Received: Dec-02-20 11:34

Prepared

Analyzed

Batch

1,1,1,2-Tetrachloroethane	U	2.00	ug/L	1	B20L005	Dec-02-20	Dec-03-20
Ethylbenzene	U	2.00	"	"	"	"	"
m+p-Xylene	U	4.00	"	"	"	"	"
o-Xylene	U	2.00	"	"	"	"	"
Styrene	U	2.00	"	"	"	"	"
Bromoform	U	2.00	"	"	"	"	"
Isopropylbenzene	U	2.00	"	"	"	"	"
Bromobenzene	U	2.00	"	"	"	"	"
1,2,3-Trichloropropane	U	2.00	"	"	"	"	"
n-Propylbenzene	U	2.00	"	"	"	"	"
2-Chlorotoluene	U	2.00	"	"	"	"	"
,3,5-Trimethylbenzene	U	2.00	"	"	"	"	"
4-Chlorotoluene	U	2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U	2.00	"	"	"	"	"
ert-Butylbenzene	U	2.00	"	"	"	"	"
1,2,4-Trimethylbenzene	U	2.00	"	"	"	"	"
sec-Butylbenzene	U	2.00	"	"	"	"	"
1,3-Dichlorobenzene	U	2.00	"	"	"	"	"
p-Isopropyltoluene	U	2.00	"	"	"	"	"
1,4-Dichlorobenzene	U	2.00	"	"	"	"	"
1,2-Dichlorobenzene	U	2.00	"	"	"	"	"
n-Butylbenzene	U	2.00	"	"	"	"	"
,2-Dibromo-3-chloropropane	U	2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U	2.00	"	"	"	"	"
Hexachlorobutadiene	U	2.00	"	"	"	"	"

Surrogate	Result	%REC	Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.71	96.5%	73-124	"	"	"
1,2-Dichloroethane-d4	10.1	100%	84-122	"	"	"
Toluene-d8	10.0	100%	88-108	"	"	"
4-Bromofluorobenzene	9.69	96.9%	84-108	"	"	"

2.00

2.00

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

%REC



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-201201 (2012003-06)		Matrix: W	ater	Sampled: Do	ec-01-20 17:	01 Re	ceived: Dec-(	02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L004	Dec-02-20	Dec-02-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	II .	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	II .	"
Chloroform	U			2.00	"	"	"	"	"
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	II .	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	n .	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	II .	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	m m	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-FB001-201201 (2012003-06)		Matrix: W	ater	Sampled: Do	ec-01-20 17	7:01 Red	eived: Dec-(	02-20 11:34	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20L004	Dec-02-20	Dec-02-20
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	"	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
tert-Butylbenzene	U			2.00	"	II .	"	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
sec-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	II .	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	II .	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC	Batch	Prepared	Analyzed
Dibromofluoromethane	9.83			97.8%		73-124	"	"	"
1,2-Dichloroethane-d4	9.94			98.7%		84-122	"	"	"
Toluene-d8	9.80			98.0%		88-108	"	"	"
4-Bromofluorobenzene	9.99			99.9%		84-108	"	"	"
1 Diomojiuoiovenzene	7.77			77.770		07.100			

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB001-201201 (2012003-07)		Matrix: W	ater	Sampled: Do	ec-01-20 09	0:00 Red	ceived: Dec-0	Dec-02-20 11:34		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L004	Dec-02-20	Dec-02-20	
Chloromethane	U			2.00	"	"	"	"	"	
Vinyl chloride	U			2.00	"	"	"	"	"	
Bromomethane	U			2.00	"	"	"	"	"	
Chloroethane	U			2.00	"	"	"	"	"	
Trichlorofluoromethane	U			2.00	"	"	"	"	"	
1,1-Dichloroethene	U			2.00	"	"	"	"	"	
Acetone	U			12.5	"	n .	"	"	"	
Carbon disulfide	U			2.00	"	"	"	"	"	
Methylene chloride	U			2.00	"	"	"	"	"	
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"	
1,1-Dichloroethane	U			2.00	"	"	"	"	"	
2,2-Dichloropropane	U			2.00	"	"	"	"	"	
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"	
2-Butanone	U			12.5	"	"	ıı .	"	"	
Bromochloromethane	U			2.00	"	"	ıı .	"	"	
Chloroform	U			2.00	"	n n	"	"	"	
1,1,1-Trichloroethane	U			2.00	"	n n	"	"	"	
Carbon tetrachloride	U			2.00	"	n n	"	"	"	
1,1-Dichloropropene	U			2.00	"	n n	"	"	"	
Benzene	U			2.00	"	n n	"	"	"	
1,2-Dichloroethane	U			2.00	"	"	"	"	"	
Trichloroethene	U			2.00	"	"	"	"	"	
1,2-Dichloropropane	U			2.00	"	"	"	"	"	
Dibromomethane	U			2.00	"	"	"	"	"	
Bromodichloromethane	U			2.00	"	n n	"	"	"	
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"	
4-Methyl-2-pentanone	U			5.00	"	n .	ıı .	ıı	"	
Toluene	U			2.00	"	"	"	"	"	
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"	
1,1,2-Trichloroethane	U			2.00	"	n n	"	"	"	
Tetrachloroethene	U			2.00	"	"	"	"	"	
1,3-Dichloropropane	U			2.00	"	"	"	"	"	
2-Hexanone	U			5.00	"	"	"	"	"	
Dibromochloromethane	U			2.00	"	"	"	"	"	
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"	
Chlorobenzene	U			2.00	"	"	"	"	"	
Chioropenzene	U			2.00						

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

Paper	A11-TB001-201201 (2012003-07)		Matrix: W	ater	Sampled: D	ec-01-20 09	):00 Red	ceived: Dec-0	02-20 11:34	
Part	Analyte	Result		MDL		Units	Dilution	Batch	Prepared	Analyzed
New Part   New Part	1,1,1,2-Tetrachloroethane	U			2.00	ug/L	1	B20L004	Dec-02-20	Dec-02-20
No	Ethylbenzene	U			2.00	"	"	"	"	"
Syriete   U   2.00	m+p-Xylene	U			4.00	"	"	"	"	"
Septemble   U   2,00	o-Xylene	U			2.00	"	"	"	"	"
Property   Property	Styrene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane   U   2,00   " " " " " " " " " " " " " " " " " "	Bromoform	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane   U   2,00   " " " " " " " " " " " " " " " " " "	Isopropylbenzene	U			2.00	"	"	"	"	"
Propylbenzene   U   2.00   " " " " " " " "   " "   "   "   "	Bromobenzene	U			2.00	"	"	"	"	"
Propylbenzene   U   2.00   " " " " " " " "   " "   "   "   "	1,2,3-Trichloropropane	U			2.00	"	"	"	"	"
1,2,2-Tiertachlorochtane   U   2,00   " " " " " " " " " "   " " "   " "   "		U			2.00	"	"	"	"	"
A-Chlorotoluene	2-Chlorotoluene	U			2.00	"	"	"	"	"
	1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
	4-Chlorotoluene	U			2.00	"	"	"	"	"
1,24-Trimethylbenzene	1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	"	"
1,2,4-Trinkingherzene   U   2.00   " " " " " " " " " " "   " "   "   "	tert-Butylbenzene	U			2.00	"	"	"	"	"
1,3-Dichlorobenzene	1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"
P-Isopropyltoluene	sec-Butylbenzene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene   U   2.00   "	1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,2-Dicthorobenzene	1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane   U   2.00   "	1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dibronio-3-Chioropropane         U         2.00         " <t< td=""><td>n-Butylbenzene</td><td>U</td><td></td><td></td><td>2.00</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td></t<>	n-Butylbenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
Naphthalene         U         2.00         "	1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene         U         2.00         " <td>Hexachlorobutadiene</td> <td>U</td> <td></td> <td></td> <td>2.00</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td>	Hexachlorobutadiene	U			2.00	"	"	"	"	"
Surrogate         Result         %REC         Limits         Batch         Prepared         Analyzed           Dibromofluoromethane         10.1         100%         73-124         "         "         "         "           1,2-Dichloroethane-d4         10.4         103%         84-122         "         "         "         "           Toluene-d8         9.86         98.6%         88-108         "         "         "         "	Naphthalene	U			2.00	"	"	"	"	"
Surrogate         Result         %REC         Limits         Batch         Prepared         Analyzed           Dibromofluoromethane         10.1         100%         73-124         "         "         "         "           1,2-Dichloroethane-d4         10.4         103%         84-122         "         "         "         "           Toluene-d8         9.86         98.6%         88-108         "         "         "         "		U			2.00	"	"	"	"	"
Dibromofluoromethane         10.1         100%         73-124         "         "         "           1,2-Dichloroethane-d4         10.4         103%         84-122         "         "         "         "           Toluene-d8         9.86         98.6%         88-108         "         "         "         "	Surrogate	Result			%REC			Batch	Prepared	Analyzed
1,2-Dichloroethane-d4     10.4     103%     84-122     "     "     "       Toluene-d8     9.86     98.6%     88-108     "     "     "     "	, and the second							"		"
Toluene-d8 9.86 98.6% 88-108 " " " "								"	"	"
								"	"	"
								"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-201201-D (2012005-01) Matrix: Water Sampled: Dec-02-20 10:50 Received: Dec-03-20 10:57 Flags / Reporting Analyte MDL Result Qualifiers Dilution Batch Prepared Analyzed Limit Units Ethylbenzene 3660 100 ug/L 50 B20L005 Dec-02-20 Dec-03-20 200 m+p-Xylene 8100 1,2,4-Trimethylbenzene 169 100 %REC Surrogate Result %REC Batch Prepared Analyzed Limits 9.76 97.0% Dibromofluoromethane 73-124 1,2-Dichloroethane-d4 10.1 99.8% 84-122 Toluene-d8 9.78 97.8% 88-108 4-Bromofluorobenzene 9.83 98.3% 84-108

A11-MW007-201201-D (2012005-01RE	l)	N	Iatrix: Wate	er Sar	npled: Dec-	02-20 10:50	Receive	ed: Dec-03-20	10:57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
Chloromethane	U			10.0	"	"	"	"	"
Vinyl chloride	U			10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U			10.0	"	"	"	"	"
Trichlorofluoromethane	U			10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U			10.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			10.0	"	"	"	"	"
2-Butanone	U			62.5	"	"	"	"	"
Bromochloromethane	U			10.0	"	"	"	"	"
Chloroform	U			10.0	"	"	"	"	"
1,1,1-Trichloroethane	U			10.0	"	II .	"	"	"
Carbon tetrachloride	U			10.0	"	"	"	"	"
1,1-Dichloropropene	U			10.0	"	"	"	"	"
Benzene	44.3			10.0	"	"	"	"	"
1,2-Dichloroethane	U			10.0	"	"	"	"	"
Trichloroethene	U			10.0	"	"	"	"	"
1,2-Dichloropropane	U			10.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

11-MW007-201201-D (2012005-01RE1)		M	Matrix: Water			02-20 10:50	Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dibromomethane	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
Bromodichloromethane	U			10.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			10.0	"	"	"	"	"
4-Methyl-2-pentanone	U			25.0	"	"	"	"	"
Toluene	U			10.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			10.0	"	"	"	"	"
1,1,2-Trichloroethane	U			10.0	"	"	"	"	"
Tetrachloroethene	U			10.0	"	II .	"	"	"
1,3-Dichloropropane	U			10.0	"	"	"	"	"
2-Hexanone	U			25.0	"	"	"	"	"
Dibromochloromethane	U			10.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			10.0	"	"	"	"	"
Chlorobenzene	U			10.0	"	II .	"	"	"
1,1,1,2-Tetrachloroethane	U			10.0	"	"	"	"	"
o-Xylene	U			10.0	"	"	"	"	"
Styrene	U			10.0	"	II .	"	"	"
Bromoform	U			10.0	"	II .	"	"	"
Isopropylbenzene	486			10.0	"	"	"	"	"
Bromobenzene	U			10.0	"	"	"	"	"
1,2,3-Trichloropropane	U			10.0	"	"	"	"	"
n-Propylbenzene	454			10.0	"	"	"	"	"
2-Chlorotoluene	U			10.0	"	"	"	"	"
1,3,5-Trimethylbenzene	56.7			10.0	"	"	"	"	"
4-Chlorotoluene	U			10.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			10.0	"	II .	"	"	"
tert-Butylbenzene	U			10.0	"	II .	"	"	"
sec-Butylbenzene	68.4			10.0	"	II .	"	"	"
1,3-Dichlorobenzene	U			10.0	"	"	"	"	"
p-Isopropyltoluene	U			10.0	"	II .	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	66.9	CustomFlag, J		10.0	"	m .	"	"	"
1,2-Dibromo-3-chloropropane	U			10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	m .	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"
Naphthalene	97.3			10.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			10.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-201201-D (20120	M	Matrix: Water Sampled: Dec-02-20 10:50					Received: Dec-03-20 10:57		
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.97			99.1%		73-124	B20L008	Dec-04-20	Dec-04-20
1,2-Dichloroethane-d4	10.4			104%		84-122	"	"	"
Toluene-d8	10.3			103%		88-108	"	"	"
4-Bromofluorobenzene	9.19			91.9%		84-108	"	"	"

A11-MW007-201201 (2012005-02)	Matrix: V	Water	Sampled: I	Dec-02-20	10:50	Received: Dec			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethylbenzene	3300			100	ug/L	50	B20L005	Dec-02-20	Dec-03-20
m+p-Xylene	7390			200	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.2			102%		73-124	"	"	"
1,2-Dichloroethane-d4	10.3			102%		84-122	"	"	"
Toluene-d8	10.1			101%		88-108	"	"	"
4-Bromofluorobenzene	9.78			97.8%		84-108	"	"	"

A11-MW007-201201 (2012005-02RE1)		Mati	rix: Water	Sampl	ed: Dec-02	-20 10:50	Received:	Dec-03-20 1	0:57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
Chloromethane	U			10.0	"	"	"	"	"
Vinyl chloride	U			10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U			10.0	"	"	"	"	"
Trichlorofluoromethane	U			10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U			10.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			10.0	"	"	"	"	"
2-Butanone	U			62.5	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



1,2,4-Trimethylbenzene

sec-Butylbenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

### Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-201201 (2012005-02RE1) Matrix: Water Sampled: Dec-02-20 10:50 Received: Dec-03-20 10:57 Flags / Analyte Qualifiers Result MDL Dilution Batch Prepared Analyzed Limit Units Bromochloromethane U 10.0 ug/L 5 B20L008 Dec-04-20 Dec-04-20 Chloroform U 10.0 U 10.0 1,1,1-Trichloroethane U 10.0 Carbon tetrachloride U 1,1-Dichloropropene U 10.0 Benzene 1,2-Dichloroethane U 10.0 U 10.0 Trichloroethene U 10.0 1,2-Dichloropropane Dibromomethane U 10.0 " U 10.0 Bromodichloromethane cis-1,3-Dichloropropene U 10.0 4-Methyl-2-pentanone U 25.0 U 10.0 Toluene trans-1,3-Dichloropropene U 10.0 " " 1,1,2-Trichloroethane U 10.0 10.0 Tetrachloroethene U U 10.0 1,3-Dichloropropane 2-Hexanone U 25.0 U 10.0 Dibromochloromethane 1,2-Dibromoethane (EDB) U 10.0 U 10.0 Chlorobenzene 1,1,1,2-Tetrachloroethane U 10.0 10.0 o-Xylene U U 10.0 " Styrene Bromoform U 10.0 109 10.0 Isopropylbenzene 10.0 Bromobenzene U 1,2,3-Trichloropropane 10.0 n-Propylbenzene 104 10.0 " 2-Chlorotoluene U 10.0 10.0 1,3,5-Trimethylbenzene 14.4 U 10.0 4-Chlorotoluene 1,1,2,2-Tetrachloroethane 10.0 " U 10.0 tert-Butylbenzene

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

35 of 2146 (Full Package)

10.0

10.0

131

17.5



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW007-201201 (2012005-02RE1)		Matri	x: Water	Sampl	ed: Dec-02	2-20 10:50	Received:	Dec-03-20 1	0:57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,3-Dichlorobenzene	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
p-Isopropyltoluene	U			10.0	"	"	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	19.9	B, CustomFlag, J		10.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U	<u></u>		10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	"	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"
Naphthalene	34.0	В		10.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			10.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.0			99.6%		73-124	"	"	"
1,2-Dichloroethane-d4	10.3			102%		84-122	"	"	"
Toluene-d8	9.82			98.2%		88-108	"	"	"
4-Bromofluorobenzene	9.25			92.5%		84-108	"	"	"

A11-MW004A-201201 (2012005-03RE1)	11-MW004A-201201 (2012005-03RE1)			Matrix: Water Sampled: Dec-02-20 15:00 Received: Dec-0					03-20 10:57	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Toluene	34200			1250	ug/L	625	B20L008	Dec-04-20	Dec-04-20	
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed	
Dibromofluoromethane	9.83			97.7%		73-124	"	"	"	
1,2-Dichloroethane-d4	10.6			105%		84-122	"	"	"	
Toluene-d8	10.1			101%		88-108	"	"	"	
4-Bromofluorobenzene	9.78			97.8%		84-108	"	"	"	

A11-MW004A-201201 (2012005-03RE2)	Ma	trix: Wate	er Samj	pled: Dec-(	02-20 15:00	Receive	Received: Dec-03-20 10:57			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	
Dichlorodifluoromethane	U			50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20	
Chloromethane	U			50.0	"	"	"	"	"	
Vinyl chloride	U			50.0	"	"	"	"	"	
Bromomethane	U			50.0	"	"	"	"	"	
Chloroethane	U			50.0	"	"	"	"	"	

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW004A-201201 (2012005-03RE2)	Matrix: Wat		Received: Dec-03-20 10:57
	Flags /	D	

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Trichlorofluoromethane	U			50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20
1,1-Dichloroethene	U			50.0	"	"	"	"	"
Acetone	U			312	"	"	"	"	"
Carbon disulfide	U			50.0	"	"	"	"	"
Methylene chloride	U			50.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			50.0	"	"	"	"	"
1,1-Dichloroethane	U			50.0	"	"	"	"	"
2,2-Dichloropropane	U	(LCS), J		50.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			50.0	"	"	"	"	"
2-Butanone	U			312	"	"	"	"	"
Bromochloromethane	U			50.0	"	"	"	"	"
Chloroform	U			50.0	"	"	"	"	"
1,1,1-Trichloroethane	U			50.0	"	"	"	"	"
Carbon tetrachloride	U			50.0	"	"	"	"	"
1,1-Dichloropropene	U			50.0	"	"	"	"	"
Benzene	U			50.0	"	"	"	"	"
1,2-Dichloroethane	U			50.0	"	"	"	"	"
Trichloroethene	U			50.0	"	"	"	"	"
1,2-Dichloropropane	U			50.0	"	"	"	"	"
Dibromomethane	U			50.0	"	"	"	"	"
Bromodichloromethane	U			50.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			50.0	"	"	"	"	"
4-Methyl-2-pentanone	U			125	"	"	"	"	"
trans-1,3-Dichloropropene	U			50.0	"	"	"	"	"
1,1,2-Trichloroethane	U			50.0	"	"	"	"	"
Tetrachloroethene	U			50.0	"	"	"	"	"
1,3-Dichloropropane	U			50.0	"	"	"	"	"
2-Hexanone	U			125	"	"	"	"	"
Dibromochloromethane	U			50.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			50.0	"	"	"	"	"
Chlorobenzene	U			50.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			50.0	"	"	"	"	"
Ethylbenzene	331			50.0	"	"	"	"	"
m+p-Xylene	489			100	"	"	"	"	"
o-Xylene	52.2			50.0	"	"	"	"	"
Styrene	U			50.0	"	"	"	"	"
Bromoform	U			50.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Reported: Project Number: ILD981000417 Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

### Volatiles by GC/MS, EPA 8260C (modified) **US EPA Region 5 LSASD Analytical Services Branch**

A11-MW004A-201201 (2012005-03RE2)	Matrix: Water	Sampled: Dec-02-20 15:00	Received: Dec-03-20 10:57
	Flags /		

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Isopropylbenzene	U			50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20
Bromobenzene	U			50.0	"	"	"	"	"
1,2,3-Trichloropropane	U			50.0	"	"	"	"	"
n-Propylbenzene	U			50.0	"	"	"	"	"
2-Chlorotoluene	U			50.0	"	"	"	"	"
1,3,5-Trimethylbenzene	U			50.0	"	"	"	"	"
1-Chlorotoluene	U			50.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			50.0	"	"	"	"	"
tert-Butylbenzene	U			50.0	"	"	"	"	"
1,2,4-Trimethylbenzene	U			50.0	"	"	"	"	"
sec-Butylbenzene	U			50.0	"	"	"	"	"
1,3-Dichlorobenzene	U			50.0	"	"	"	"	"
p-Isopropyltoluene	U			50.0	"	"	"	"	"
1,4-Dichlorobenzene	U			50.0	"	"	"	"	"
1,2-Dichlorobenzene	U			50.0	"	"	"	"	"
n-Butylbenzene	U			50.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			50.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			50.0	"	"	"	"	"
Hexachlorobutadiene	U			50.0	"	"	"	"	"
Naphthalene	U			50.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			50.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.97			99.1%		73-124	"	"	"
1,2-Dichloroethane-d4	10.5			104%		84-122	"	"	"
Toluene-d8	10.3			103%		88-108	"	"	"
4-Bromofluorobenzene	9.76			97.6%		84-108	"	"	"

84-108 4-Bromofluorobenzene 9.76 97.6%

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



4-Bromofluorobenzene

#### **Environmental Protection Agency Region 5**

#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

9.52

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-201201 (2012005-04) Matrix: Water Sampled: Dec-02-20 08:45 Received: Dec-03-20 10:57 Flags / Reporting Analyte MDL Dilution Result Qualifiers Batch Prepared Analyzed Limit Units m+p-Xylene 6310 200 ug/L 50 B20L005 Dec-02-20 Dec-03-20 %REC Analyzed %REC Prepared Surrogate Result Batch Limits Dibromofluoromethane 9.86 98.0% 73-124 1,2-Dichloroethane-d4 10.4 103% 84-122 88-108 Toluene-d8 9.68 96.8%

95.2%

84-108

A11-MW003-201201 (2012005-04RE1)		Mat	rix: Water	Sampl	Sampled: Dec-02-20 08:45 Received: Dec-03-20		Dec-03-20 10	):57	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
Chloromethane	U			10.0	"	"	"	"	"
Vinyl chloride	U			10.0	"	"	"	"	"
Bromomethane	U			10.0	"	"	"	"	"
Chloroethane	U			10.0	"	"	"	"	"
Trichlorofluoromethane	U			10.0	"	"	"	"	"
1,1-Dichloroethene	U			10.0	"	"	"	"	"
Acetone	U			62.5	"	"	"	"	"
Carbon disulfide	U			10.0	"	"	"	"	"
Methylene chloride	U			10.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			10.0	"	"	"	"	"
1,1-Dichloroethane	U			10.0	"	"	"	"	"
2,2-Dichloropropane	U			10.0	"	"	"	"	"
cis-1,2-Dichloroethene	U			10.0	"	"	"	"	"
2-Butanone	U			62.5	"	"	"	"	"
Bromochloromethane	U			10.0	"	"	"	"	"
Chloroform	U			10.0	"	"	"	"	"
1,1,1-Trichloroethane	U			10.0	"	"	"	"	"
Carbon tetrachloride	U			10.0	"	"	"	"	"
1,1-Dichloropropene	U			10.0	"	"	"	"	"
Benzene	U			10.0	"	"	"	"	"
1,2-Dichloroethane	U			10.0	"	"	"	"	"
Trichloroethene	U			10.0	"	"	"	"	"
1,2-Dichloropropane	U			10.0	"	"	"	"	"
Dibromomethane	U			10.0	"	"	"	"	"
Bromodichloromethane	U			10.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-201201 (2012005-04RE1)		Matr	ix: Water	Sampl	ed: Dec-02	-20 08:45	Received:	Dec-03-20 1	0:57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
cis-1,3-Dichloropropene	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
4-Methyl-2-pentanone	U			25.0	"	"	"	"	"
Toluene	U			10.0	"	"	"	"	"
trans-1,3-Dichloropropene	U			10.0	"	"	"	"	"
1,1,2-Trichloroethane	U			10.0	"	"	"	"	"
Tetrachloroethene	U			10.0	"	"	"	"	"
1,3-Dichloropropane	U			10.0	"	"	"	"	"
2-Hexanone	U			25.0	"	"	"	"	"
Dibromochloromethane	U			10.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			10.0	"	"	"	"	"
Chlorobenzene	U			10.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			10.0	"	"	"	"	"
Ethylbenzene	256			10.0	"	n .	"	"	"
o-Xylene	U			10.0	"	"	"	"	"
Styrene	U			10.0	"	"	"	"	"
Bromoform	U			10.0	"	"	"	"	"
Isopropylbenzene	38.5			10.0	"	"	"	"	"
Bromobenzene	U			10.0	"	"	"	"	"
1,2,3-Trichloropropane	U			10.0	"	"	"	"	"
n-Propylbenzene	37.3			10.0	"	"	"	"	"
2-Chlorotoluene	U			10.0	"	"	"	"	"
1,3,5-Trimethylbenzene	55.0			10.0	"	"	"	"	"
4-Chlorotoluene	U			10.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			10.0	"	"	"	"	"
tert-Butylbenzene	U			10.0	"	"	"	"	"
1,2,4-Trimethylbenzene	178			10.0	"	"	"	"	"
sec-Butylbenzene	15.0			10.0	"	"	"	"	"
1,3-Dichlorobenzene	U			10.0	"	"	"	"	"
p-Isopropyltoluene	U			10.0	"	"	"	"	"
1,4-Dichlorobenzene	U			10.0	"	"	"	"	"
1,2-Dichlorobenzene	U			10.0	"	"	"	"	"
n-Butylbenzene	13.1	B, CustomFlag, J		10.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			10.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			10.0	"	"	"	"	"
Hexachlorobutadiene	U			10.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

40 of 2146 (Full Package)

10.0

16.6

В

Naphthalene



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW003-201201 (2012005-04RE1)		Matı	rix: Water	Sampl	led: Dec-0	2-20 08:45	Received	Dec-03-20 1	0:57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,3-Trichlorobenzene	U			10.0	ug/L	5	B20L008	Dec-04-20	Dec-04-20
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.81			97.5%		73-124	"	"	"
1,2-Dichloroethane-d4	10.9			108%		84-122	"	"	"
Toluene-d8	9.91			99.1%		88-108	"	"	"
4-Bromofluorobenzene	9.79			97.9%		84-108	"	"	"

A11-MW002-201201 (2012005-05RE1)		Matr	ix: Water	Sampl	ed: Dec-02	2-20 13:10	Received:	Dec-03-20 10	):57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Toluene	33200			1250	ug/L	625	B20L008	Dec-04-20	Dec-04-20
Ethylbenzene	10200			1250	"	"	"	"	"
m+p-Xylene	31900			2500	"	"	"	"	"
o-Xylene	6140			1250	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.1			100%		73-124	"	"	"
1,2-Dichloroethane-d4	10.7			106%		84-122	"	"	"
Toluene-d8	9.89			98.9%		88-108	"	"	"
4-Bromofluorobenzene	9.65			96.5%		84-108	"	"	"

1-MW002-201201 (2012005-05RE2)		Mati	Matrix: Water Sampled: I		ed: Dec-02	: Dec-02-20 13:10		Received: Dec-03-20 10:57	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20
Chloromethane	U			50.0	"	"	"	"	"
Vinyl chloride	U			50.0	"	"	"	"	"
Bromomethane	U			50.0	"	"	"	"	"
Chloroethane	U			50.0	"	"	"	"	"
Trichlorofluoromethane	U			50.0	"	"	"	"	"
1,1-Dichloroethene	U			50.0	"	"	"	"	"
Acetone	U			312	"	"	"	"	"
Carbon disulfide	U			50.0	"	"	"	"	"
Methylene chloride	U			50.0	"	"	"	"	"
trans-1,2-Dichloroethene	U			50.0	"	"	"	"	"
1,1-Dichloroethane	U			50.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-MW002-201201 (2012005-05RE2) Matrix: Water Sampled: Dec-02-20 13:10 Received: Dec-03-20 10:57

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
2,2-Dichloropropane	U	(LCS), J		50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20
cis-1,2-Dichloroethene	U			50.0	"	"	"	"	"
2-Butanone	U			312	"	"	"	"	"
Bromochloromethane	U			50.0	"	"	"	"	"
Chloroform	U			50.0	"	"	"	"	"
1,1,1-Trichloroethane	U			50.0	"	"	"	"	"
Carbon tetrachloride	U			50.0	"	"	"	"	"
1,1-Dichloropropene	U			50.0	"	"	"	"	"
Benzene	U			50.0	"	"	"	"	"
1,2-Dichloroethane	U			50.0	"	"	"	"	"
Trichloroethene	U			50.0	"	"	"	"	"
1,2-Dichloropropane	U			50.0	"	"	"	"	"
Dibromomethane	U			50.0	"	"	"	"	"
Bromodichloromethane	U			50.0	"	"	"	"	"
cis-1,3-Dichloropropene	U			50.0	"	"	"	"	"
4-Methyl-2-pentanone	U			125	"	"	"	"	"
trans-1,3-Dichloropropene	U			50.0	"	"	"	"	"
1,1,2-Trichloroethane	U			50.0	"	"	"	"	"
Tetrachloroethene	U			50.0	"	"	"	"	"
1,3-Dichloropropane	U			50.0	"	"	"	"	"
2-Hexanone	U			125	"	"	"	"	"
Dibromochloromethane	U			50.0	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			50.0	"	"	"	"	"
Chlorobenzene	U			50.0	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			50.0	"	"	"	"	"
Styrene	U			50.0	"	"	"	"	"
Bromoform	U			50.0	"	"	"	"	"
Isopropylbenzene	78.1			50.0	"	"	"	"	"
Bromobenzene	U			50.0	"	"	"	"	"
1,2,3-Trichloropropane	U			50.0	"	"	"	"	"
n-Propylbenzene	87.4			50.0	"	"	"	"	"
2-Chlorotoluene	U			50.0	"	"	"	"	"
1,3,5-Trimethylbenzene	161			50.0	"	"	"	"	"
4-Chlorotoluene	U			50.0	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			50.0	"	"	"	"	"
tert-Butylbenzene	U			50.0	"	"	"	"	"
1,2,4-Trimethylbenzene	588			50.0	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



#### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Reported: Project Number: ILD981000417 Jan-15-21 13:14 Chicago IL, 60604 Project Manager: Terese Van Donsel

### Volatiles by GC/MS, EPA 8260C (modified) **US EPA Region 5 LSASD Analytical Services Branch**

A11-MW002-201201 (2012005-05RE2) Received: Dec-03-20 10:57 Matrix: Water Sampled: Dec-02-20 13:10 Flags /

Analyte	Result	Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
sec-Butylbenzene	U			50.0	ug/L	25	B20L008	Dec-04-20	Dec-05-20
1,3-Dichlorobenzene	U			50.0	"	"	"	"	"
p-Isopropyltoluene	U			50.0	"	"	"	"	"
1,4-Dichlorobenzene	U			50.0	"	"	"	"	"
1,2-Dichlorobenzene	U			50.0	"	"	"	"	"
n-Butylbenzene	U			50.0	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			50.0	"	"	"	"	"
1,2,4-Trichlorobenzene	U			50.0	"	"	"	"	"
Hexachlorobutadiene	U			50.0	"	"	"	"	"
Naphthalene	58.5	В		50.0	"	"	"	"	"
1,2,3-Trichlorobenzene	U			50.0	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	10.0			99.5%		73-124	"	"	"
1,2-Dichloroethane-d4	10.6			105%		84-122	"	"	"
Toluene-d8	10.5			105%		88-108	"	"	"

A11-TB002-201201 (2012005-06RE1)		Matrix: Water	Sampled:	Dec-02-20 13:10	Received: I	Dec-03-20 10:	57
4-Bromofluorobenzene	9.43		94.3%	84-108	"	"	"
Toluene-d8	10.5		105%	88-108	"	"	"
1,2-Dichloroethane-d4	10.6		105%	84-122	"	"	"
Dibromofluoromethane	10.0		99.5%	73-124	"	"	"

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Dichlorodifluoromethane	U			2.00	ug/L	1	B20L008	Dec-04-20	Dec-04-20
Chloromethane	U			2.00	"	"	"	"	"
Vinyl chloride	U			2.00	"	"	"	"	"
Bromomethane	U			2.00	"	"	"	"	"
Chloroethane	U			2.00	"	"	"	"	"
Trichlorofluoromethane	U			2.00	"	"	"	"	"
1,1-Dichloroethene	U			2.00	"	"	"	"	"
Acetone	U			12.5	"	"	"	"	"
Carbon disulfide	U			2.00	"	"	"	"	"
Methylene chloride	U			2.00	"	"	"	"	"
trans-1,2-Dichloroethene	U			2.00	"	"	"	"	"
1,1-Dichloroethane	U			2.00	"	"	"	"	"
2,2-Dichloropropane	U			2.00	"	"	"	"	"
cis-1,2-Dichloroethene	U			2.00	"	"	"	"	"
2-Butanone	U			12.5	"	"	"	"	"
Bromochloromethane	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



### **US EPA Region 5 LSASD Analytical Services Branch**

536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Superfund, US EPA Region 5 Project: SE Rockford GW Contamination

77 West Jackson Boulevard Project Number: ILD981000417 Reported:
Chicago IL, 60604 Project Manager: Terese Van Donsel Jan-15-21 13:14

# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

A11-TB002-201201 (2012005-06RE1)		Matri	x: Water	Sample	d: Dec-02-2	20 13:10	Received: 1	Dec-03-20 10:	57
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Chloroform	U			2.00	ug/L	1	B20L008	Dec-04-20	Dec-04-20
1,1,1-Trichloroethane	U			2.00	"	"	"	"	"
Carbon tetrachloride	U			2.00	"	"	"	"	"
1,1-Dichloropropene	U			2.00	"	"	"	"	"
Benzene	U			2.00	"	"	"	"	"
1,2-Dichloroethane	U			2.00	"	"	"	"	"
Trichloroethene	U			2.00	"	"	"	"	"
1,2-Dichloropropane	U			2.00	"	"	"	"	"
Dibromomethane	U			2.00	"	"	"	"	"
Bromodichloromethane	U			2.00	"	"	"	"	"
cis-1,3-Dichloropropene	U			2.00	"	"	"	"	"
4-Methyl-2-pentanone	U			5.00	"	"	"	"	"
Toluene	U			2.00	"	"	"	"	"
trans-1,3-Dichloropropene	U			2.00	"	"	"	"	"
1,1,2-Trichloroethane	U			2.00	"	"	"	"	"
Tetrachloroethene	U			2.00	"	"	"	"	"
1,3-Dichloropropane	U			2.00	"	"	"	"	"
2-Hexanone	U			5.00	"	"	"	"	"
Dibromochloromethane	U			2.00	"	"	"	"	"
1,2-Dibromoethane (EDB)	U			2.00	"	"	"	"	"
Chlorobenzene	U			2.00	"	"	"	"	"
1,1,1,2-Tetrachloroethane	U			2.00	"	"	"	"	"
Ethylbenzene	U			2.00	"	"	"	"	"
m+p-Xylene	U			4.00	"	"	"	"	"
o-Xylene	U			2.00	"	"	"	"	"
Styrene	U			2.00	"	"	"	n .	"
Bromoform	U			2.00	"	"	"	"	"
Isopropylbenzene	U			2.00	"	"	"	"	"
Bromobenzene	U			2.00	"	"	"	"	"
1,2,3-Trichloropropane	U			2.00	"	II .	"	m .	"
n-Propylbenzene	U			2.00	"	"	"	"	"
2-Chlorotoluene	U			2.00	"	"	"	"	"
1,3,5-Trimethylbenzene	U			2.00	"	"	"	"	"
4-Chlorotoluene	U			2.00	"	"	"	"	"
1,1,2,2-Tetrachloroethane	U			2.00	"	"	"	m m	"
tert-Butylbenzene	U			2.00	"	"	n .	"	"
1,2,4-Trimethylbenzene	U			2.00	"	"	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314



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# Volatiles by GC/MS, EPA 8260C (modified) US EPA Region 5 LSASD Analytical Services Branch

11-TB002-201201 (2012005-06RE1)		Matri	x: Water	Sampled: Dec-02-20 13:10		Received: Dec-03-20 10:57			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
sec-Butylbenzene	U			2.00	ug/L	1	B20L008	Dec-04-20	Dec-04-20
1,3-Dichlorobenzene	U			2.00	"	"	"	"	"
p-Isopropyltoluene	U			2.00	"	"	"	"	"
1,4-Dichlorobenzene	U			2.00	"	"	"	"	"
1,2-Dichlorobenzene	U			2.00	"	"	"	"	"
n-Butylbenzene	U			2.00	"	"	"	"	"
1,2-Dibromo-3-chloropropane	U			2.00	"	"	"	"	"
1,2,4-Trichlorobenzene	U			2.00	"	"	"	"	"
Hexachlorobutadiene	U			2.00	"	"	"	"	"
Naphthalene	U			2.00	"	"	"	"	"
1,2,3-Trichlorobenzene	U			2.00	"	"	"	"	"
Surrogate	Result			%REC		%REC Limits	Batch	Prepared	Analyzed
Dibromofluoromethane	9.82			97.7%		73-124	"	"	"
1,2-Dichloroethane-d4	10.4			103%		84-122	"	"	"
Toluene-d8	9.92			99.2%		88-108	"	"	"
4-Bromofluorobenzene	9.37			93.7%		84-108	"	"	"

Report Name: 2012003,2012005 VOA - 8260 FINAL Jan 15 21 1314

### Southeast Rockford Area 11 - Groundwater Samples

**Data Validation Report** Sample Delivery Group (SDG) Number: 680-192276 **Eurofins Test America** Laboratory: Matrix: Groundwater Collection date: 12/1/2020 & 12/2/2020 Analysis/Methods: Dissolved Gases - Methane - RSK-175 Samples in SDG: Sample Number Lab ID Sample Number Lab ID 680-192276-1 A11-MW006-201201 680-192276-7 A11-MW003-201202 680-192276-2 A11-MW130A-201201 680-192276-8 A11-MW007-201202 680-192276-3 A11-MW005-201201 680-192276-9 A11-MW007-201202-D 680-192276-4 A11-MW001-201201 680-192276-10 A11-MW002-201202 680-192276-5 A11-MW004B-201201 680-192276-11 A11-MW004A-201202 680-192276-6 A11-FB01-201201 680-192276-12 A11-TB01-201201 Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA January 2017). Methane (RSK-175) Precision: Yes No N/A Yes Are the field duplicate relative percent differences (RPD) ≤30% (aqueous)? Were the Matrix Spike Duplicate RPDs ≤ 20%? (Or lab defined limits) Yes Laboratory Control Spike Duplicates RPD within limits? Yes Laboratory Duplicate RPDs within limits? N/A Comments (note deviations): Field Sample **Duplicate** %RPD Qualifiers Associated Samples **Duplicates** A11-MW007-A11-MW007-201202-D 201202 Acceptable MS/MSD %RPD <u>Limit</u> Qualifiers Associated Samples MS/MSD 680-192276-3 Acceptable LCS/LCSD Limits %RPD Qualifiers Associated Samples Acceptable LCS 680-647488/6/7 LCS 680-647488/3/4 Acceptable **Laboratory Duplicate** %RPD **Limits** Qualifiers Associated Samples N/A Accuracy: Yes No N/A Was the Matrix Spike/Matrix Spike Duplicate criteria met? (frequency ≥ 5% and laboratory determined control limits) Yes Laboratory Control Sample criteria met? Yes Were the Laboratory Method Blank results all < RL? Yes Were the Field Blanks results all < RL? No Was the ICAL criteria met? Yes Was the CCV criteria met? Yes Was the Tuning criteria met? N/A Were the Surrogate % recoveries within laboratory determined control limits? N/A Were the Internal Standard areas within ± 50 - 150%? N/A Comments (note deviations): Concentration (mg/L) MDL /PQL Qualifiers Associated Samples

Nondetect

MB 680-647488/8

Field Blank A11-TB01-201201 A11-FB01-201201	Methane Methane	Concentration 0.47 J 0.52 J	MDL /PQL 0.29 / 0.58 0.29 / 0.58		Qualifiers U-RL U-RL	Associated Samples 680-192276-3 680-192276-3	
Surrogates N/A		<u>%R</u>	<u>Limit</u>		Qualifiers	Associated Samples	
MS/MSD MS/MSD 680-192276-3	3	<u>%R</u> Acceptable	<u>Limits (%)</u>		Qualifiers	Associated Samples	
LCS/LCSD LCS 680-647488/ 6 / 7 LCS 680-647488/ 3 / 4		<u>%R</u> Acceptable Acceptable	<u>Limits</u>		Qualifiers	Associated Samples	
ICAL 2/17/2020 8:45 3/04/2020 9:12		<u>RRF</u> Acceptable Acceptable	%RSD Acceptable Acceptable		Qualifiers	Associated Samples	
ICV / CCV		<u>RRF</u>	<u>%D</u>	<u>Limits</u>	Qualifiers	Associated Samples	
3/04/2020 11:29		Acceptable	Acceptable				
CCV							
12/08/2020 17:37		Acceptable	Acceptable				
12/08/2020 17:12 12/08/2020 20:20		Acceptable Acceptable	Acceptable Acceptable				
Tune N/A							
Internal Standards N/A		<u>Area</u>	Area Lower / Upper Limit		Qualifiers	Associated Samples	
Representativeness: Were sampling procedures Were holding times met? Was preservation criteria n Were Chain-of-Custody rec Comments (note deviations	net? (0° C - 6° C) cords complete and prov	rided in data package?					Yes No N/A Yes Yes Yes Yes
Preservation		Cooler Temperature (Degrees C) Acceptable	Preservation Criteria		Qualifier	Associated Samples	
Holding Times	<u>Analyte</u>	Days to Extraction Acceptable	HT Criteria		Qualifier	Associated Samples	
Comparability: Were analytical procedures Comments (note deviations		as defined in the QAPP or fi	eld change docume	entation?			Yes No N/A Yes
Completeness (90%): Are all data in this SDG usa Comments (note deviations							Yes No N/A Yes

Sensitivity:

Are MDLs present and reported? Do the reporting limits meet project requirements? Comments (note deviations):

Yes No N/A Yes Yes

#### Comment:

As stated in the case narrative, the MS/MSD was spiked at the concentration range meant for the TCD detector. The methane results for the FID detector were over the calibration range as a result of the error. The recovery areas are within limits for both FID and TCD detectors. Both the FID and TCD detectors are being reported for the MS/MSD.

Data is usable with appropriate qualifiers applied.

Data Validator:	Kristine Molloy	Date:	5/2/2021
Data Reviewer:	Cherie Zakowski	Date:	5/4/2021

### **Detection Summary**

Client: CDM Smith, Inc.

Job ID: 680-192276-1

Project/Site: Methane Analysis - SE Rockford Area 11

Client Sample ID: A1	1-MW006-2012	01				Lab San	nple ID: 68	3 <b>0-192276-</b> 1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane (TCD)	8100		390	39	ug/L		RSK-175	Total/NA
Client Sample ID: A1	1-MW130A-201	201				Lab San	ple ID: 68	30-192276-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane	1.4		0.58	0.29	ug/L		RSK-175	Total/NA
Client Sample ID: A1	1-MW005-2012	01				Lab Sam	ple ID: 68	30-192276-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane	0.48		0.58		ug/L	1	RSK-175	Total/NA
Client Sample ID: A1	1-MW001-2012	01				Lab Sam	nple ID: 68	30-192276-4
				MDI	1114		-	
Analyte Methane	Result	Qualifier	RL	MDL 0.29		<u>Dil Fac</u> D	RSK-175	Prep Type Total/NA
			0.50	0.29	ug/L	•		
Client Sample ID: A1	1-MW004B-201	201				Lab San	iple ID: 68	30-192276-5
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane	20		0.58	0.29	ug/L		RSK-175	Total/NA
Client Sample ID: A1	1-FB01-201201					Lab San	ple ID: 68	30-192276-6
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane	0.52	J	0.58	0.29	ug/L	1	RSK-175	Total/NA
Client Sample ID: A1	1-MW003-2012	02				Lab San	ple ID: 68	30-192276-7
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane (TCD)	6600		390	39	ug/L		RSK-175	Total/NA
Client Sample ID: A1	1-MW007-2012	02				Lab San	ple ID: 68	30-192276-8
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane (TCD)	31000		390		ug/L	1	RSK-175	Total/NA
Client Sample ID: A1	1-MW007-2012	02-D				Lab San	nple ID: 68	30-192276-9
Analyte		Qualifier	RL	MDL	l lmi4	Dil Fac D	Method	Dran Time
Methane (TCD)	29000	Qualifier	390		ug/L	<u> </u>	RSK-175	Prep Type Total/NA
Client Sample ID: A1		02			-9-	Lah Samı		0-192276-10
-								
Analyte Methane (TCD)	31000	Qualifier	RL 390	MDL 30	ug/L	<u>Dil Fac</u> D	RSK-175	Prep Type  Total/NA
<u> </u>		202			ug/L			
Client Sample ID: A1	1-WWUU4A-201	202				Lab Sam	ole ID: 680	0-192276-11
Analyte		Qualifier	RL	MDL		Dil Fac D		Prep Type
Methane	250		0.58	0.29	ug/L	1	RSK-175	Total/NA
Client Sample ID: A1	1-TB01-201201					Lab Samp	ole ID: 680	0-192276-12
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Methane	0.47		0.58		ug/L		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

### **Client Sample Results**

Client: CDM Smith, Inc. Job ID: 680-192276-1 Project/Site: Methane Analysis - SE Rockford Area 11 Client Sample ID: A11-MW006-201201 Lab Sample ID: 680-192276-1 Date Collected: 12/01/20 12:11 **Matrix: Water** Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 390 39 ug/L 12/08/20 16:46 **Methane (TCD)** 8100 Client Sample ID: A11-MW130A-201201 Lab Sample ID: 680-192276-2 Date Collected: 12/01/20 09:35 **Matrix: Water** Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Result Qualifier Analyte RL **MDL** Unit D Prepared Analyzed Dil Fac 0.58 Methane 0.29 ua/L 12/08/20 16:59 1.4 Client Sample ID: A11-MW005-201201 Lab Sample ID: 680-192276-3 Date Collected: 12/01/20 13:50 Matrix: Water Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 0.29 ug/L Methane 0.48 J 0.58 12/08/20 17:45 Client Sample ID: A11-MW001-201201 Lab Sample ID: 680-192276-4 Date Collected: 12/01/20 15:31 **Matrix: Water** Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit D **Prepared** Analyzed Dil Fac 0.58 0.29 ug/L 12/08/20 18:24 Methane 11 Client Sample ID: A11-MW004B-201201 Lab Sample ID: 680-192276-5 Date Collected: 12/01/20 16:45 **Matrix: Water** Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 0.58 0.29 ug/L 12/08/20 18:36 **Methane** 20 Client Sample ID: A11-FB01-201201 Lab Sample ID: 680-192276-6 Date Collected: 12/01/20 17:05 **Matrix: Water** Date Received: 12/04/20 11:00 Method: RSK-175 - Dissolved Gases (GC) Analyte Result Qualifier RL **MDL** Unit ח Prepared Analyzed Dil Fac 0.58 **Methane** 0.52 J 0.29 ug/L 12/08/20 18:49

Analyzed

12/08/20 19:02

Lab Sample ID: 680-192276-7

RI

390

**MDL** Unit

39 ug/L

D

Prepared

Result Qualifier

6600

Client Sample ID: A11-MW003-201202

Method: RSK-175 - Dissolved Gases (GC)

Date Collected: 12/02/20 08:45

Date Received: 12/04/20 11:00

Analyte

Methane (TCD)

**Matrix: Water** 

Dil Fac

### **Client Sample Results**

Client: CDM Smith, Inc. Job ID: 680-192276-1

Project/Site: Methane Analysis - SE Rockford Area 11

Client Sample ID: A11-MW007-201202 Lab Sample ID: 680-192276-8

Date Collected: 12/02/20 10:50 Matrix: Water

Date Received: 12/04/20 11:00

Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane (TCD)
 Qualifier 31000
 RL 390
 MDL ug/L ug/L
 Unit ug/L
 D verpared ug/L
 Analyzed 12/08/20 19:15
 Dil Fac 12/08/20 19:15

Client Sample ID: A11-MW007-201202-D Lab Sample ID: 680-192276-9

Date Collected: 12/02/20 10:50 Matrix: Water

Date Received: 12/04/20 11:00

Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane (TCD)
 Qualifier
 RL graph
 MDL upt
 Unit ug/L
 D prepared
 Analyzed Analyzed
 Dil Fac Dil Fac

Client Sample ID: A11-MW002-201202 Lab Sample ID: 680-192276-10

Date Collected: 12/02/20 13:10

Date Received: 12/04/20 11:00

Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane (TCD)
 Qualifier
 RL 31000
 MDL ug/L
 Unit ug/L
 D Prepared ug/L
 Analyzed 12/08/20 19:41
 Dil Fac 12/08/20 19:41

Client Sample ID: A11-MW004A-201202 Lab Sample ID: 680-192276-11

Date Collected: 12/02/20 15:00

Date Received: 12/04/20 11:00

Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane
 Qualifier
 RL 0.58
 MDL unit ug/L
 D prepared ug/L
 Analyzed 12/08/20 19:54
 Dil Fac 12/08/20 19:54

Client Sample ID: A11-TB01-201201 Lab Sample ID: 680-192276-12

Date Collected: 12/01/20 08:00

Date Received: 12/04/20 11:00

Method: RSK-175 - Dissolved Gases (GC)

 Analyte
 Result Methane
 Qualifier Qualifier
 RL No.58
 MDL Unit No.58
 Unit No.59
 Description
 Prepared No.59
 Analyzed No.59
 Dil Fac No.59

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Matrix: Water

**Matrix: Water** 

**Matrix: Water** 

### **Default Detection Limits**

Client: CDM Smith, Inc. Job ID: 680-192276-1

Project/Site: Methane Analysis - SE Rockford Area 11

### Method: RSK-175 - Dissolved Gases (GC)

Analyte	RL	MDL	Units	
Methane	0.58	0.29	ug/L	
Methane (TCD)	390	39	ug/L	